

FIVE YEAR PLAN

OF

JAIPUR STATE

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FIVE YEAR PLAN OF JAIPUR STATE

THIS is an attempt, conditioned by our resources and difficulties, to prepare the outline of a five year plan for a better Jaipur. Laissez faire is dead, long live planned economy. Its obective is materialistic, the increase in the standard of life, but its motif and its fulfilment call for the best in human spirit. For the dry bones of any plan can spring to life, only if vitalised by the will of the Government, and the enthusiasm of the people, fused into an integral whole. The recent constitutional developments in the State will mean little if, as a result, this integration is not fostered. And the standard of life to be raised is not of the few but the many. All aspects of the economic life must be embraced. To increased production must be added better distribution. The industrial development must at the same time be sustained by an increase in the purchasing power of the agriculturists. But a higher standard of life involves more than such increase. It means also better health, a quickening of intelligence and sensitiveness, and above all an ability to pursue corporate, economic, cultural and self-governing activities. The masses have to be helped to make efforts to get rid of poverty and insecurity, dirt and disease, stagnation and death to things that are worthwhile, which at present are largely their lot. This is perhaps the highest exercise of creative energy. Fulfilment can come only after a long process of trial and error. This plan is thus only a framework and no blue print. It will always seek amplification in the light both of experience, and public criticism, ially of the representatives of the people in the Council a A ., recently constituted.

Each department is dealt with separately, but not because of any lack of recognition that all spheres must interact closely. For each head of this note, there is a corresponding detailed statement, with its key statement. These detailed statements are to be found in the appendices.

I.—AGRICULTURE

EVEN after industry can draw off, the present surplus engaged in agriculture, and the future growth of population, and a balance is struck between agriculture and industry, the former will remain predominant. It is thus the keystone of our plan.

1. Training of Staff.

Jaipurians must be trained not only to man the rapidly growing Agricultural Department, but also to undertake scientific farming. As early as places can be secured, five young men will be trained in post-graduate, and five in graduate courses, at State expense. Further, it is understood that the Birla Educational Trust propose to start an Agricultural College at Pilani. Cultivated land and a large dairy farm are already available there for this purpose. The State will set up an Agricultural School at Jaipur, for training the subordinate staff required.

2. Extension of Irrigation.

The land is fertile but arid. No single factor can, therefore, add so much to its productivity as extension of irrigation. To ensure sufficiency in food and reduce the chances of famine, the objective should be to extend the irrigated area from one-seventh of the total cultivated area to about half. Large State irrigation reservoirs, canals, or State hydro-electric tube wells, have been dealt with under "Irrigation". Other measures to extend irrigation are indicated below:—

(a) Of the existing 'pakka' wells, about 22,000 are in use and 12,000 are out of use. This is largely on account of their striking rocky strata or impervious clay. While rock boring seldom succeeds, vertical boring

(*ii*) There will be no increase in rent during the term of the Settlement and then the assessment will be 25% less than on land irrigated by pakka wells. No. permanent increase in revenue has been estimated, as it is likely that most of the kachcha wells will cease to exist before the next Settlement takes place.

(*e*) In this manner there should be an extension of irrigated area from minor means in the next five years as follows:—

1. Restoration of 6,000 pakka wells @ 8 bighas per well.	48,000	bighas
2. 500 new pakka well @ 8 bighas per well.	8,000	"
3. 1,000 small village tanks @ 5 bighas per tank	5,000	"
4. 2,500 kham wells @ 5 bighas per well.	12,500	"
	73,000	"

(*f*) As shown in the note and the detailed statement under "Irrigation", the large irrigation projects are expected to extend the irrigated area as follows:—

(i) 500 hydro electric tube wells	...	50,000 bighas
(ii) 7 large [illegible] 5,21,700 ...	...	5,00,000 bighas
Total	...	5,50,000 bighas

Grand total of the area in which irrigation is to be extended:

Minor works	...	...	73,000	bighas.
Major works	...	...	5,50,000	bighas.
			6,23,000	bighas.

We may take it that irrigation will be extended roughly over 6 lakh bighas.

(*g*) The present irrigated area is as follows:—

Khalsa	3,40,000 bighas.
Non-Khalsa	4,00,000—a very rough estimate.
	7,40,000

This means that we propose to nearly double the area of the irrigated land in the next five years. The total area under cultivation is as follows:—

Khalsa	17,25,000 bighas.
Non-Khalsa	21,75,000 ,, —a very rough estimate.
	42,00,000

Instead of the irrigated area being, as at present about one-seventh of the total cultivated area, it will become about one-fourth. This will mean a big leap forward in the productivity of agriculture.

(*h*) Of the 6 lakh bighas that the hydro electric and big reservoir irrigation schemes should irrigate, about 2 lakh bighas are at present uncultivated lands. Most of this culturable waste is out of holdings, or untenanted. Thus extension of agriculture is possible over at least 2 lakh bighas in the near future

(g) In a year or two, the question of multiplication of seeds, which pass the experimental tests, will arise. As indicated under the head of "Co-operation", multipurpose co-operative societies will be encouraged to set up seed stores, if need be, with the help of Government subsidies.

Improved implements

Generally much more research is required before we can develop distinctly better implements for bullock power. However, there are already a few improved agricultural implements which in other places have been found to be somewhat better than 'deshi' varieties. These should be tried further, and distributed in this State. Improved chaff cutters, and cane-crushers are appreciated widely. But their present prices are prohibitive. A Central State Workshop has been proposed under "Industries". This is required for:—

(a) research work in order to devise better implements and tools, both for agriculture and cottage industries, and

(i) A Tahsildar will be specially deputed to inspect villages within a 10 miles radius of Jaipur, and allot suitable cultivable waste lands, where kuchcha or pucca wells can be dug, expressly for the cultivation of vegetables.

(ii) Cash subsidies will be given for new vegetable cultivation in 'parat' lands, whether within or outside existing holdings, Rs 50,000 have been provided for this purpose.

(iii) Taqavi or cash grants will be paid for construction of wells, or other capital outlay.

(iv) The Agricultural Department will give improved vegetable seeds, including potato, on a subsidy system

(v) Compost, chemical fertilisers, or other manures will be distributed to these vegetable growers on special terms.

(b) A similar drive will be initiated round about the other important towns.

c.)(Small agricultural farms, particularly those growing vegetables, will be attached to a numbr of secondary rural schools, as shown under "Education".

7. Increased fruit cultivation.

A large extension of vegetable and fruit cultivation will improve both the levels of nutrition, and income of cultivators. McCollum and Simmonds state in "The Newer Knowledge of Nutrition" that with plenty of vegetables and fruits, we need not worry too much about nutritional niceties. A Government of Punjab Fruit Specialist recently toured in the State, and his report suggests a bright prospect for all areas, where irrigation is possible. Fruits which can do well are the citrus variety, papayas, mango, guava, grafted 'ber' mulberry and 'falsa'. Experiments will be conducted in the Central Fruit Garden. The greatest difficulty in fruit cultivation is to obtain plants of good varieties and [illegible] The seven f[illegible]

nurseries to be established all over the State will largely solve this problem. The staff will also give advise free. The new Tenancy Act, recently passed expressly encourages the plantation of trees, whether of fruit, fuel or timber by extending considerably the cultivators' rights over them. Also as indicated under the head of "Forests" Government will consider the grant of concessions in the matter of rent or cash subsidies for this purpose.

8. Increased production of manures.

Our cultivator behaves towards his soil, as the moneylender does to him. He gives little and takes out much. Actually the soil in a hot climate needs more manure than elsewhere, being poorer in humus and nitrogen.

The farm-yard manure he uses is more than half as poor in quality and quantity, as it need be. He burns half the cow dung. He loses even more of the liquid counterpart, so rich in nitrogen content. But even if all the farmyard manure possible was utilised, plenty of other organic and inorganic manures would still be required.

Here again the department must carry out research and experiments in order to find out the most suitable fertilisers to be used for different crops on different kinds of soil.

In the meantime, we propose the following measures:

(a) Help Village panchayats to start communal forests, so as to decrease the use of cow dung as fuel.

(b) Introduce simple methods of conserving urine of cattle.

(c) Sell at subsidised rates ammonium sulphate, to be obtained through Government of India. Rs. 50,000/- has been provided for this purpose.

(d) Compost the refuse and nightsoil of Jaipur City by the hot fermentation method evolved at Bangalore. In the light of experience gathered, extend this to the 31 new town municipalities and sell the compost to the neighbouring cultivators.

(e) Scientists are not agreed as to what is the best method of composting for rural areas. The department must arrange further experimental work in this, both on their farms and in panchayat villages.

(f) Oil cakes are rich in nitrogen. But it is not enough to encourage oil seed production, or more oil mills. Steps will also be taken to secure that oil and not oil seed is exported.

(g) Steps are afoot to get a bone-crushing factory established in the State, and to discourage the export of bones. One of the terms with the factory will be that it will sell to the Government, or cultivators as much bone meal as may be required for use as manure.

(h) The heavy chemicals factory, to be set up in the Sambhar Samlat area, in order to utilise salt bitterns, will be induced to manufacture such chemical fertilisers as may be practicable and useful.

9. Extension of cultivation and other special measures.

i. The following problems admit of being tackled together, and largely by the same staff :—

Extension of cultivation, particularly in areas to be commanded by the seven irrigation reservoir projects; settlement of ex-soldiers and others; creation of communal forests dealt with in detail under the head "Forests"; plugging and afforestation by way of experiments to remedy gully erosion; contour bunding

as an experimental measure to conserve rain water, and remedy sheet erosion. There are four Tehsils Malpura, Toda Rai Singh, Phagi and Khandar, which afford the largest scope in these directions. Almost all the areas involved in the seven irrigation reservoir projects belong to these Tehsils. But success in all these problems will depend most of all on how carefully particular villages and lands for these purposes are selected. First of all a Tehsildar assisted by two Qanungos and two Patwaris, specially deputed, will make a preliminary survey of most of the village in these four tehsils. On the basis of this, a committee of experts, consisting of a Soldiers Resettlement Officer (Nazim's grade), a Deputy Director of Agriculture, the Forest Working Plan Officer and an Irrigation Engineer, will put up concrete proposals to further these objects. They will specify the exact lands to be used for each purpose, mark out allotments for ex-soldiers, and others who want to go in for improved farming, suggest the terms and conditions for communal forests, etc. The Soldiers Resettlement Officer will put into effect the actual settlement of by soldiers and others. A Special Forest Officer, who will be appointed for purposes indicated under "Forests", will *inter alia* supervise the creation of communal forests, and experimental measures for reclamation and checking soil erosion in agricultural land. For the latter purpose, one Agricultural Inspector, one Overseer and subordinate staff have also been provided under "Agriculture". It is possible that for guiding this work, we may have to secure for a short while an expert Engineer from Sholapur District in Bombay Presidency, where contour bunding has over come periodic famines owing to a very low rain fall.

10. Resettlement of soldiers and others

(*a*) The best one or two lakh bighas, especially in areas commanded by the irrigation projects will be reserved for ex-soldiers. Grants averaging 100 compact bighas in contiguous blocks could be made to one, two or three thousand ex-soldiers as may be required. The rest will go to those who are willing to take up improved farming, perhaps on cooperative lines. If adequate numbers of such are not forthcoming for the unoccupied lands, which will be commanded by the new irrigation projects, these will be allotted to those in the villages whose present holdings are small. Such allotments could be made a fulcrum for consolidation of present holdings by means of exchange. The State will provide new settlements of ex soldiers and civilians, with sites made fit for habitation, drinking wells, and perhaps also cattle troughs. Taqavi or in special cases grant-in-aid will also be given for capital outlay. An expenditure of two lakhs has been provided for this purpose. Handsome cash awards will be given to certain categories of the decorees among the soldiers, which should be utilised in investment for productive purposes.

(*b*) The Soldiers Resettlement Officer will coordinate the efforts of the various development departments who will do their utmost to help these new settlements, not only to improved agricultural, but a better way of life, which expresses in peace terms, the esprit de corps, which these soldiers displayed so valiantly during the war Efforts will be made to foster cooperative farming in these settlements. Last year, the Soviet government, the most tractor minded and electrically conscious government in the world, got 22,000 tractors to rehabilitate Ukrainian agriculture. Perhaps, we can try one or

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from Britian in the nineteenth century, fortified the money lenders, powers in the law courts to the extent that even the plough bullocks and the entire produce of the cultivator could be sold in execution of decrees. Credit alone is not the panacea of all ills from which the agriculturist suffers to-day. This plan recognises amply that to change agriculture from an unprofitable industry to a surplus economy, are required other measures besides credit. But the plan must also give a definite answer to this question. Will the Government, as hitherto in British India, and the States, remain chiefly a spectator to this vast exploitation "red in tooth and claw" of the majority of the people, through unregulated credit ? The last fifty years have been characterised by the most original experiments in State intervention in almost all sectors of the socio-economic front. But this only in countries politically free, both western and eastern. In India, we have only imitated and that with measures which are free from much risk, and on a small scale. State Agricultural Banks have proved a great success in Egypt, Canada, New Zealand. India has not yet experimented with these. Long before the present war, capitalist countries such as U.S.A., Britain, Cuba, Argentina, Australia, Czechoslovakia, Germany tried diverse methods of securing for selected agricultural produce a minimum price. These varied from tariff protection, and regulation of exports, to a State monopoly of sale. In India, it is only within the last two years of the war that any thing in this direction has been attempted. In the various forms of the co-operative movement India has not contributed one original move. The employment of the co-operative principle for the organisation of marketing owes its

inception and remarkable successes in so many fields all to other countries, not in one instance to India.

This plan, therefore, categorically answers that the State must try to tackle the problem of agricultural credit, directly, as well as through the co-operative movement. The problem is vast and there must be plenty of trial and error. But a large beginning must be made in the immediate future. There is a special reason for the urgency. To-day the cultivator is more out of debt than he has been for many years. If ever agricultural credit can be put on a sound basis, it is now. We have not yet formulated detailed proposals. Before doing so, we think it desirable to consider the shortly expected recommendations of the Committee appointed by the Government of India to review the position regarding agricultural credit, of which our Revenue Minister is a member. What we contemplate, in addition to an intensification of the Co-operative movement, are as follows:—

1. Detailed enquiry into present debts.
2. Debt conciliation or scaling down of debts.
3. Encouraging commercial banks, and particularly Joint Stock Banks, to play a bigger part than they have done in the past in supplying agricultural finance.
4. The setting up of a State Agricultural Bank or a Credit Corporation with branches, ultimately in most villages, which will provide both short and long term credit. We must start with a sufficient number of villages to give the experiment a real chance. As soon as Government have formulated detailed proposals, these will be referred to a Committee, to be set up for this purpose.

15. Agricultural Marketing.

The development of co-operative marketing will be dealt with under the head of "Co-operation". But this cannot help more than a minority in the next five years. Attempts must, therefore, be made, as quickly as possible, to regulate the general marketing of agricultural produce. We may begin with selected large "mandis". Gradually, we will have to extend Government regulation to all "mandis" and perhaps license all dealers, wholesale, retail, and village, itinerant. The Statistical Officer, who has just been appointed, will report on the immediate and elementary measure required, after making enquiries and collecting statistics through the revenue staff. Such measures would include defining, and specifying the charges to be levied, introduction of standard weights and measures, and perhaps legislation to ensure that disputes are settled promptly by an independent agency. It would also be necessary to levy such fees in respect of "mandis" as will cover the cost of whatever special marketing inspectorate staff have to be appointed. The Jaipur Weights and Measures Act which has already been enacted will be enforced as soon as feasible.

Also construction of new and better 'mandies' are being encouraged by the grant of land on concessionl terms and other means. The State is laying out spacious 'mandies' in the new town of [illegible] Manpur, and in Jhunjhunu town as part of its improvement scheme. The cost will be recovered by sale of plots, the shops to be of an approved design. A Bonded Warehouse is to be put up near the railway station in Jaipur City, for the deposit of commodities having to pay customs or excise duty till their despatch elsewhere. This will cost about [illegible]

an l will be debited to the budget of the Customs and Excise Department.

16. Price of Agricultural Produce.

This is a highly controversial matter. On the one hand are those who make the question of price the very root of agricultural planning, and regard all other measures as palliatives. They argue that the perpetual uncertainty of the price is an insuperable bar to either the extension or improvement of cultivation. They point out how "one of the greatest steps forward to intensify agricultural production in Great Britain is the guarantee of price and offtake of produce, which Govenment has given to farmers for a specified period". They urge that at present it is guesses of wholesale dealers that largely settle prices from time to time. Their are others, who are equally vehement in denouncing all price control, as only an accessory of the black market, and the corruption and "*zulm*" of the subordinate Government staff. They point to the experience of the last two years in India, and the lack of agreement among experts about the principles of enforcement of price control. This plan considers it unwise at present to commit itself either way as to the desirability or otherwise of price control or on the methods of enforcement, which embrace equally controversial questions, such as the need for monopoly procurement; whether olny wholesale, or retail prices also should be controlled, the extent of buffer stocks required. But we ought certainly to prepare for the contingency when we may find price control inevitable. To this end, the Statistical Officer recently appointed will gather statistics and make a preliminary report which may also be referred to a Committee for final recommendations.

II.—ANIMAL HUSBANDARY

1. Training of Staff.

The following Jaipurians will be trained outside at State expense for State service, as soon as admissions can be secured for them :—

Two for post-graduate training,

Ten as Veterinary Surgeons,

Three as Dairy Inspectors,

Three in Poultry Farming,

One in Sheep Breeding, and

One in Fisheries.

2. Agencies for treatment.

(a) There are only two Veterinary Hospitals at present. Three more have been sanctioned this year. Six more will be started, two each year, so that every Nizamat has a hospital, and there is one at Khandar which is a special cattle rearing area.

(b) The Veterinary Surgeons in charge will also tour within their respective circles, in order to deal with outbreaks of cattle disease. Their efforts will be supplemented by two Veterinary Surgeons appointed solely for touring, and 19 Veterinary stockmen, who are being trained locally, and will be appointed shortly. These Stockmen will also treat ordinary ailments and carry out castrations.

3. Improved Bulls.

(a) The Rishab Sudhar Mandal founded in memory of the late Shree Jamnalal Bajaj have distributed 109 improved bulls in the course of the last year, and are to continue their good work.

(b) The State will purchase, and distribute free, 60 bulls every year, till the State Cattle Breeding Farm can produce bulls for this purpose.

(c) The Cattle Breeding Farm will be started at Bassi at a capital cost of one lakh, with 100 Haryana cows, and 2 bulls. About 25 bull calves are expected to be produced annually for free distribution or sale.

(d) 20 Murrah buffalo-bulls will be purchased and sold at concessional rates every year. For the first two years, this will be confined to the Khandar tract, which is the most important from the point of view of the production of ghee.

(e) Particular villages will be supplied all the breeding bulls they need, so that all the scrub bulls in the locality can be castrated, and these key villages can serve as subsidiary stud farms.

(f) Every Veterinary Hospital will be provided with one or two stud bulls.

4. Improvement of milk and ghee supply.

(a) Five large dairy farms round Jaipur City have just been started. These have been given one acre per animal, up to a 100 acres, free of rent, on a 30 years' lease. Advice and a stud bull will also be given free; also other concessions. Such help will be given to more dairy farms, which are expected to spring up in the near future. One condition is that pure and sanitary milk will be supplied.

(b) Selected "ghosies" from Jaipur City will be helped to shift to new sites on the outskirts of the City. These will be given land free or on concessional rates; also subsidies for construction of proper sheds. Technical advice and stud bulls will be given free.

(c) Later, similar concessions will be extended to dairy farms and "ghosies" round some of the larger municipal towns.

(d) Individual milk and ghee producers will be organised into co-operative milk and ghee unions. A Ghee grading station will be set up at Jaipur City. Also a co-operative milk society catering for Jaipur City will be helped to acquire a cold storage plant.

(e) Dr. Radha Kamal Mukerji in his "Food Planning for 400 Millions" states "that the manufacture of cheap ghee substitute would also be important from the stand point of the Indian dietary, the price of ghee at present being too high to be used normally in the present household." But we have to see that vegetable ghee, manufactured or imported, is not deleterious and that it is not used for adulteration of ghee. Special measures including Legislation to achieve this are under consideration.

5. Poultry Farming.

(a) A Government Poultry Farm has already been started in Jaipur. This will supply pure bred stocks to small scale farms at concessional rates. Also two small Government poultry units will be set up in the districts, in order to encourage poultry farming in the rural areas.

(b) Until certain poultry diseases have been conquered, it is risky for individuals to go in for large farms. But small farms will be encouraged not only round about Jaipur City, but also in the rural areas, particularly in the case of ex-soldiers and they will be given land, cockerels and pullets of pure breed, on concessional rates, and free expert advice.

6. Sheep and goat breeding.

A Government sheep breeding farm will be started also at Bassi, with a 100 Bikaner sheep and 3 rams, so as to distribute aboute 50 rams a year. 12 Betal he-goats will be distributed each year free of charge.

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7. Cattle feeding.

What has been termed the "Triangular conflict: Man-Land-Cattle" is not as acute in Rajputana as elsewhere. The number of cattle is not as excessive as in the denser population regions. The immediate problem is to provide fodder reserves for years of scanty rainfall. Then we must improve the grazing facilities and increase the fodder supply, so as to make fodder reserves unnecessary in the future.

(a) Twenty-seven reserve fodder stocks of grasses and straws of cultivated crops, one for each tehsil, will be put up in five years at a cost of 5 lakhs. A few such reserve stocks were tried in the past in Sikar, and proved very useful in lean years. They last for several years, without much loss of the nutritive value. The revenue staff will supervise the building up of these stocks. Additional clerical staff will be required only when sales have to be effected from the stocks. The price charged will cover the cost of such staff. The Officer-in-Charge of the Grass Farm, and the Director of Agriculture will give the technical advice required.

(b) The Settlement Officer has specified areas, totalling nearly one lakh bighas, for free grazing in the entire Nizamat Hindaun and in Tehsil Todarai Singh. This is a measure that will be introduced in other Tehsils also, during future settlement or revision operations. The control of these areas will be vested in panchayats wherever these are set up. Substantial free grazing areas have recently been earmarked for Jaipur City.

(c) In villages with panchayats, a very simple forms of rotational or controlled grazing will be introduced under the guidance of the Officer-in-charge, Grass Farm. The Advisory Board of the Imperial Council of Agricultural Research in their Memorandum

on Agriculture and Animal Husbandry, 1944, state that "the system can be worked in forest areas, but is difficult to put in practice under village conditions. Fencing is nearly always necessary" But both in Tehri and British Garhwal panchayats have successfully introduced controlled grazing, without fencing. It is hoped that such success will be possible here also. Further, fencing is possible without wire. In some of the existing Grass Farm Department "beerh" fencing has been made with "babul" and other branches. It is said that "if an area is protected from grazing for a year or two, the amount of grass, which becomes available from it, is increased three or four-fold".

(*d*) Under "Forests" have been outlined the attempts that will be made to increase very substantially the areas of the reserved and communal forests. In these areas there will, of course, be 'babul' and 'khejra' which are already found extensively. But what will be planted on the largest scale will be "prosopis juliflora" or 'Vilaiti Khejra'. The reason is that this species suits our requirements most. It resists drought and will grow rapidly even in sandy soil with as low an average rainfall as 13", and without any irrigation whatsoever. It gives fuel, charcoal, small timber, and produces two crops a year of pods, which are good fodder. This tree introduced over large dry areas would largely solve any question of a fodder famine.

(*e*) In order to bring down the price of fodder in Jaipur City, firms dealing in it will be encouraged to use electric chaff-cutters, and to arrange for transport through motor trucks.

(f) The only measure immediately practicable to increase "concentrates" for cattle feeding is to stop the export of oil cakes both by oil mills and 'ghanis'. These are, however used for manure also.

8. Fisherise. Improvements in fisheries are easily possible, as many of the large tanks are owned by the State. A candidate has been sent to Calcutta at State expense for training in fisheries. The stock in State bunds will be improved and protected. At present, several of these bunds do not have the good varieties that flourish in these tracts, such as the "rohu", "saol" and 'singara'. Some have no fish at all. A fish cold storage plant will be set up in the fish market to be built in Jaipur. City. Suitable groups of fishermen will be formed into co-operative societies, which will be helped to buy and run their own lorries. At present fishermen of Tordi Sagar have to pay as much as Rs. 65/- a day for transport of 2 to 3 maunds of fish by lorry to Jaipur.

III.—IRRIGATION

One of the many cruel practical jokes of Nature is that the high lying plains of Jaipur should thirst for water while next door 60% of the 3 5 billion cubic feet of surface water should every year run to waste down the alluvial plains of Hindustan into the sea. Whatever large extensions of irrigation may be possible in Hindustan itself, as far as we can see, human ingenuity will never be able to transport some of that water to our parched soils. Rajputana has to rely on its own resources in its perpetual struggle against a precarious and niggardly rainfall. Our plan recognises that, above everything else, this struggle must be won, for as much of our lands, as is possible.

1. Hydro-electric Scheme.

An agreement has already been reached regarding the extension of the proposed Kotah State Hydro-electric scheme to Jaipur. The scheme itself is expected to produce 1 lac H.P. Five States Kotah, Jaipur, Gwalior Udaipur and Indore will share in the costs and benefits of the scheme. The Chambal river will be dammed at a gorge, which is suitable, and water would be supplied to the generating station by means of penstock pipes, through the dam. The scheme has been approved by the Electrical Adviser to the Government of India, and the Electrical Commissioner. Only details remain to be worked out. This will be done shortly. Kotah State have definitely agreed to let us have, to start with, 20,000 H.P. The power will be transmitted to Sawai Madhopur and distributed practically all over the State. The provisional estimate of utilisation is as follows:—

	H.P.
Tube well irrigation	3,000
Industrial and Lighting	17,000

2. Tube wells.

This will suffice for 500 tube wells irrigating roughly about 50,000 bighas. But we have yet to see if tube wells will generally succeed. These can be regarded as successful, only if each tube well can yield as much as one cusec or 22,000 gallons, as otherwise the cultivator may not find it worthwhile to pay the irrigation rates. A boring scheme for test tube wells will shortly be put into force. Success is very probable near banks of streams, where there is sufficient water bearing strata. Tube wells could be multipled in Sheikhawati, and other specially arid regions, if it is found that there is sufficient water, even at a depth of 300 ft.

3. Industrial load.

At present we produce from our thermal power station only 3,333 H. P. The hydro-electric scheme will give us immediately five times as much for industrial and lighting purposes. This will include heavy and medium industries, located largely in urban centres, small industries to decentralise which to rural areas a special attempt will be made, and also subsidiary agricultural, and cottage industries. Most towns and a large number of villages will be electrified. 20,000 H.P. may fall short for these various demands. But Kotah State have agreed that whenever we want, we can take further power up to another 10,000 H.P.

The cost of this scheme is expected to be Rs. one crore, as against the Rs. 2½ crore estimated for the Banas hydro-electric scheme, which we had previously under our consideration.

4. Reservoir projects

There are seven schemes of surface water storage by means of river dams and tanks, of which

the rough estimate of cost amounts to a little over 3 crores. By far the most important is the Bisalpur reservoir project, damming the Banas river. This is expected to irrigate 4,00,000 bighas or 2,50 000 acres of the most fertile lands, in the south-west of the State. The other six projects are expected to irrigate 1,16,160 bighas or 72,600 acres. What all this will mean by way of increased productivity, and extension of cultivation has already been shown under the head " Agriculture ".

6. Increase in Revenue

The relative appendix shows the extent of the productivity of these eight schemes on an investment of nearly four crores. The annual net income is expected to be about twenty-one lakhs annually or roughly 5.2 per cent, after meeting the maintenance charges, which have been calculated at the rate of ten per cent of the anticipated income. The gross income from the seven reservoir projects will accrue from an irrigation rate of Rs. 2/8/- per bigha for khalsa land and Rs 5/- per bigha for non-khalsa land, and an "irrigation advantage" rate of 1/12/- per bigha in respect of khalsa land only. It may be added that roughly these seven projects will irrigate khalsa and non-khalsa lands at the ratio of two to one.

IV.—FORESTS

THE problems are fourfold:—

(i) To improve what forests we have.

(ii) To increase the area under reserved forests.

(iii) To encourage communal forests and individual plantations of fuel or timber wood.

(iv) To protect the existing private forests from destruction.

The proposals indicated below serve to meet one or more of these problems.

Training. No aspect of State administration is in such urgent need of improvement as the forests. This is the result of having untrained officers-in-charge and subordinates in the past. It is proposed to send one candidate to the two years higher Forestry Course at Edinburgh at State expense, and five candidates for the Ranger's training One is already under such training. In the meantime, four trained and experienced forest officers have been appointed as Conservator of Forests, Working Plan Officer, and the two Divisional Forest Officers. With their help, the essentials of a proper forest management, which are missing, will be supplied as quickly as possible.

2. Extension of General Forest Areas. The final objective advised by experts is to increase the forest area to 25% of the State. At present it is only about 7½%, of which a little more than half is covered with forests, which are effective from the point of view of protection against erosion and flood. Most of this is in the eastern part, giving no protection to the hot dust-laden winds from the south-west. In the Khalsa areas, the total at present under State management is 350 square miles, of which only 100 square miles are really fit for

working. But Khalsa area alone, totalling 4,556 square miles or 16,70,000 bighas has about 1,500 square miles or 1,50,000 bighas of uncultivable waste. A good deal of this has been overgrazed or completely felled. For instance, in the 56 miles from Jaipur to Malpura, one can see hardly any vegetation excepting a little grass and some bushes of "karil" and 'ber". Of this 1,500 square miles probably 750 square miles could grow forests. This would secure a total of 1,100 square miles of forests or about 24% of the total Khalsa area. The position about the non-Khalsa areas, totalling 11,000 square miles is no better as far as the existing forest areas are concerned. In these areas also, it is possible to increase substantially the area under forests. For instance, towards Jhunjhunu there is a large area of 'pilu', which, if protected, would soon form a proper forest.

3. Increase in Reserved Forests.

Of this 750 square miles of Khalsa areas, which we should try to bring under forest in the next ten years, a substantial portion may be managed directly by the Forest Department. This should comprise of the following:

(*a*) As a rule all hill areas, which in the past have suffered particularly from forest devastation, as for *instance, on the road to Delhi* between Amber and the thirteenth mile.

(*b*) Lands which seriously *affect run-off, floods* and erosion, and should be managed primarily from the protective point of view, mostly at the headwaters of streams, or along the banks of rivers, should automatically be placed under the Forest Department. In a tract, like Jaipur, one of the most important functions of forests must be protective.

This is required not only for the well-being of the State but indeed of Hindustan. The Banas flows *into the Chambal, which joins the Jamuna* The Banganga flows into the Jamuna Serious floods in these two rivers would have influence on floods and erosion, even in Bengal!

(c) Uncultivable waste in large blocks, which have been, more than usual, devastated by over-grazing and felling, and which are not quite suitable for communal forests, or adjoin existing forest areas.

(d) Large blocks of uncultivable waste, within a radius of 10 miles of Jaipur City where the problem of fuel has been acute, as for instance, large areas in Govindpura, Durgapura, and the catchment area of the Waterworks Pumping Plant.

4. Communal Forests

Perhaps, the larger portion of the 750 square miles of Khalsa areas over which forests should be added, should constitute communal forests, to be managed by Panchayats. The trees for this purpose, already found in the State, are the 'babul' and 'khejra', but it is the "prosopis juliflora" which should figure most. Thus fuel, and timber will be brought to the cultivator's door. Lakhs of tons of cowdung are burnt every year as fuel. This could adequately manure a large portion of the cultivated area, and thereby increase substantially the food production. Fifteen communal forests have just been planted very willingly by the villagers themselves.

5. Cultivators Plantations.

In addition to an increase in the reserved forest area, and the creation of new communal forests, we must encourage cultivators to plant trees and groves. In the past, these plantations have been discouraged by the fact that cultivators both in Khalsa and non-

khalsa areas have had rights to only half the timdber of trees planted over the unirrigated lands in their holdings. The new tenancy law gives the tenant full rights over all trees planted in barani, as well as chahi lands within their holdings. Further, an attempt will be made to allot cultivators, who need this, at least one bigha per plough, expressly for the purpose of planting fruit trees, or trees for timber, fuel and fodder. Government will consider the question of grant of concessions in rent, in order to encourage the plantation of such trees in large numbers, in uncultivable waste, whether in or out of holdings. Perhaps, it may be found feasible to allow in respect of such plantations that no rent should be payable for the first ten years, and after that a very light rent. Besides, the trees already mentioned 'shisham', 'neem' and 'johrha' grow at present in 'bhoor' lands. In all sandy tracts, like Sheikhawati, both khejra and jant grow spontaneously. Their dried leaves act as manure and their leaves and beans can be used as fodder. Attempts will be made to popularise the 'vilaiti khejra' in such tracts also.

6. Commercial Plantations.

Also, individuals will be encouraged to put up forest plantations on large areas of unassessed waste lands, on a commercial basis, so as to increase the supply of fuel and timber. For this purpose, generous rent concessions will be given. No rent will be charged for ten years, and after that rent will be charged and increased every year by 25% till the full assessment is paid. Casuarina is a fast growing fuel tree, which may be tried on such plantations, with the technical help of the Forest Department.

7. Results expected.

The successful outcome of these proposals will have far reaching effects Grazing and fodder would

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7. Results expected.

The successful outcome of these proposals will have far reaching effects Grazing and fodder would

increase. Fodder famine would be a thing of the past. The cultivator would get locally his timber and fuel. Cow dung would be saved for manure. More food would be produced. The revenue of the State would increase. "Apart from this the general fertility of the country would be greatly improved. I am not suggesting that the actual amount of rain falling in Jaipur would be increased, though that might very well happen. But the 22 inches of rainfall, which falls disappears rapidly in evaporation, and floods, which carry with them the valuable top soil. This rainfall would be absorbed into the soil, and retained there for considerable periods, so that the general moisture content of the soil layers would be far higher than at present. The trees would also act as a shelter belt to lessen the force of, the desiccating hot weather wind, and to a large extent would mitigate the dust storms which are carrying away far more than people realise. There are places where this wind erosion has been removing as much as 26,000 tons of earth per square mile for at least 50 or 60 years." (Note on a "Tour in Jaipur State" by Sir Herbert Howard, I.F.S., Inspector-General of Forests to the Government of India.)

8 Improved Management.

(i) Protective measures to prevent run-off, floods and erosion will be taken comprehensively.

(ii) Demarcation and Settlement are to be carried out, and a Working Plan prepared within two years.

(iii) The past uncontrolled exploitation of forests must be undone. Over grazing should be prevented, but at the same time regeneration areas should be arranged, so as not to be large and contiguous, thereby causing undue hardship.

Forests must contribute more to the development of industries in the following ways:—

9. Help to Industries.

(a) With the establishment of more and more industries, the demand for charcoal is increasing. Much more fuel wood and charcoal must be produced and at reasonable costs.

(b) More timber wood is required for building purposes and furniture.

(c) We must experiment and try to produce suitable soft wood for matches, pencils and packing cases. As soon as we can be sure about this, two or three match factories are expected to be started in the State.

(d) Forest must supply suitable grass such as "dab" for the manufacture of paper, card-board, etc.

(e) Further subsidiary forest industries such as catechu, lac, and epiculture.

10. Expenditure involved in raising new forest areas.

(a) The improvements in existing forests can be carried out largely with the existing staff and without considerable extra expenditure. The creation of communal forests should involve no direct expenditure to Government. It will be the same with the encouragement of forests in non-khalsa areas, or encouragement to cultivators or commercial plantations in Khalsa areas. The chief item of Government expenditure will be in the increase in the area of reserved forests in Khalsa lands. We may estimate that such an increase may be up to a maximum of 300 square miles in the next 5 years. In estimating expenditure on raising these new Government forests, account has to be

taken of the following factors, which will operate to minimise the cost:—

(i) It is expected that a substantial portion of these new areas will adjoin the existing forests.

(ii) The existing subordinate forest staff is by no means over worked, since the greater part of the existing forest areas, consisting of hills, is *only under* protection, but is not fit for ordinary working. Much of the new areas, therefore, could be put in charge of the existing Forest Officers, and subordinate staff.

(iii) A substantial portion of these new areas may be near villages. Therefore, afforestation will be possible on a larger scale than is usual on taungya lines. Cultivators will be permitted to cultivate the new areas reserved for forests for two or three years free of rent provided forest plants were sown in lines at specified distances, with the *kharif* crop.

(*b*) The trees to be grown in these new areas will be largely for fuel, such as "babul", "khejra", "vilaiti khejra"; such plantations do not require watering.

The total expenditure for five years should very roughly be as follows:—

(i) Sowing, kuchcha boundry walls with trenches where required	Rs	50 000/.
(ii) Staff including on an average 100 Forest Guards, 7 Foresters, 5 Rangers, 1 trained Special Forest Officer, and clerical staff.	Rs.	2,50,000/-
	Rs.	3,00,000/-

The Special Forest Officer will work under the control of the existing Conservator of Forests. He

will also help villages to control grazing and have charge of experimental measures in soil reclamation, and checking of soil erosion in agricultural land (Scheme XXIII Agriculture).

11. Income expected.

(a) After 10 years, the new reserved forests should yield from thinnings an intermediate yield of Rs. 50,000/- p. a.

(b) After 20 years, when regular felling coupes should be sold, there should be a steady income of at least 3 lakhs a year, even after taking into account a considerable fall in present prices.

12. Legislation required.

(a) The present Forest Act needs to be amended and brought up-to-date. Such amendment as may facilitate the vast extension of reserved forests proposed, will be specially necessary.

(b) Private forests have also suffered sevrely from devastation. As recommended by Sir Herbert Howard, a Private Forest Act would probably have to be enacted. This should legislate for the prevention of mere destruction, but otherwise not interfere with the powers of private owners. This will ultimately be for the benefit both of the owners and the community.

V.—INDUSTRIES

1. The objective.

Laissez faire implied that the State had nothing to do with industry. Socialism desires largely the extinction of free enterprise, as it involves "the class appropriation of the surplus value". It would be unrealistic for this State to get involved in this clash of ideas. Our immediate task must, therefore, be to build up an industrial system, through whatever agencies are immediately available, entrepreneurs, joint stock companies or even State enterprise. We cannot be deterred or delayed by theoretical considerations of what systems would be the best from the point of view of production, or social justice. Granted that our economic expansion will not double the per capita income, nor advance the well-being of the workers to the extent theoretically possible, yet the industrialisation will relieve the existing pressure on land, reduce unemployment or under-employment, provide for a rapid accumulation of taxable income to finance an immediate expansion of social services, and improve to some extent the economic condition of the masses. The Government of India's recent Statement of Industrial Policy lays down that "apart from ordnance factories, public utilities and railways, basic industries of national importance may be nationalised, provided adequate private capital is not forthcoming and it is regarded as essential in the national interests to promote such industries". The industries, which the Government of India regard as basic, cover a wide range, but they propose to consult the provinces and States about the matter. In States like this, as a rule nationalisation is feasible only in respect of public utilities. In the future, the large hydro-electric scheme proposed, and of course, the

extensions of railway, and a new organisation of motor transport on important roads will be promoted entirely as State enterprises. But our main industrial development will be based on private enterprise and capitals which are immediately available in abundance. This does not mean that the State will not plan or control such development. In the past, too, no economy was really 'free". The entrepreneurs and businessmen planned, but did so to satisfy sectional interests. The practical alternative is thus not between "a free and a controlled economy, but between an economy, which is regulated by vested interests and one regulated by collective interests of the community". (Lipsons "A Planned Economy or Free Enterprise".) But before indicating the lines on which future development will be planned and controlled, it would be useful to outline briefly our natural resources and the progress made since 1942, almost from scratch.

2. Progress already made.

Jaipur has such valuable minerals as copper, lead, beryl, mica, glass sand, china clay, soapstone, limestone felspar, calcite, magnesite, red and yellow ochres, garnet and barytes. Sheep rearing in the sandy tracts of Sheikhawati and Torawati yields roughly fifty lakhs of pounds of wool per annum. The more fertile tracts of Sawai Madhopur and Malpura districts produce over three lakh maunds of 'til', mustard, ground-nut, linseed, castor and other oilseeds. The policy of industrialisation initiated in 1942, has already yielded substantial results. The Jaipur Companies Act, 1942, which started the joint stock system in the State has appealed both to the commercial community and to small savings. Within 3 years, 107 limited liability companies have been registered, with an aggregate

authorised capital of 19½ crores. Almost all branches of industrial and business activities are represented among the companies registered. Besides these, a number of companies registered outside the State have established branches or have secured Government's consent to the issue of capital in this State. The result is that 101 industrial establishments have already sprung up in the State, within these 3 years, involving a capital investment of 2 crores and a labour force of about 30,000 persons These do not include the existing 185 flour mills. The six large scale factories each with a subscribed capital of over 5 lakhs, are engaged in the manufacture of non-ferrous alloys, maize starch, hollow glassware, iron and steel articles required by the defence services, tents and the pulverising of talc. Among the medium and small scale industries, the more important are the engineering works, oilseed crushing, salt refinery, wire drawing, lapidary works, printing presses, manufacture of agricultural implements, gas plants, saltpetre, oil cloth and waterproof, carpets, blankets felts, tweeds, hosiery, and handloom cotton fabrics, soaps, hair oils and pharmaceutical products.

3. Future industrial projects already taken in hand.

Chief among the projects in hand are a five-crore venture for the manufacture of heavy chemicals out of the bitterns of Sambhar Salt Lake, a very large glass and pottery works at Sawai Madhopur, extraction of copper on a large scale at Khetri mines, a cotton mill, a woollen mill, a tannery, a rubber factory, a bone crushing mill, 15 oil mills, 3 vegetable oil factories, a brass rolling mill, pharmaceutical works, a cinema studio, and factories for the manufacture of cement and cement pipes, R C. poles, iron tools and imple-

ments, lanterns, cycle component parts, stoneware, tiles and refractory bricks, soap, leather goods, cutlery and scientific instruments, buckets, hollow-ware, electric bulbs, lead pencils, paints, sand paper, abrasive and matches.

4. Future development.

But we cannot be complacent. The market value of certain industrial securities has risen sharply owing to enormous profits made, but the sum total of industrial activity in India during the war has been much less than is generally supposed to be, and much of the advance has been dictated largely by immediate considerations of the war, thereby increasing the need for rationalisation. What has been achieved so far in the State is, thus, only an earnest of what is to come. But the broad objectives of this future development must always be before us. These will be as follows:—

(*a*) A greater balance between agriculture and industry. This means not merely the absorption of some of the surplus, which makes the pressure on land so great, as to make agriculture unremunerative. It also involves the full utilisation of the agricultural raw material of which an industrial use can be made, on terms most favourable to the cultivator, and the decentralisation of as many of the small and medium scale industries to rural areas, as may be possible with electric power.

(*b*) Fullest industrial utilisation within the State of our mineral resources.

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(*b*) Fullest industrial utilisation within the State of our mineral resources.

(*c*) Establishment not merely of industries producing consumption goods, but also of as many key industries, as are favoured by the resources in the State.

5. State Help.

State help will continue to be given most generously in the following ways :—

(*a*) Land will be made available at concessional rates. Six industrial sites, four for large and medium scale industries, and two for small scale have been laid out in Jaipur City. A new industrial city is being laid out at Sawai Madhopur.

(*b*) The hydro-electric scheme must provide all the power required at special industrial rates. Till this materialises the State will do its best to provide more power than is available at present. A new 1,000 K.W. generating set will be installed in Jaipur in less than a year.

(*c*) The State will give the utmost help in the procurement of priorities.

(*d*) Industrial concerns have been and will be exempted from import and export duties.

(*e*) The State will participate in capital and management where this is desirable, in order to emphasise State patronage. Twenty lakhs have been provided for this purpose.

(*f*) The State will provide facilities for industrial and technical education.

(*g*) The State must develop railways, roads, and motor transport as speedily as possible, and regulate their rates and management so as to help industries.

6. State control

It is now universally realised that the State must exercise control over industry in order to harness the productive resources and the profit motive to social ends. Such control will be exercised, on the following lines.

(*a*) Control over capital issue should continue, in order to canalise capital in directions, which may

further the interests of the community, prevent a lopsided development, and cut-throat competition.

(b) State to regulate location of industries. This should be determined both by the interests of the entrepreneur, and in order to secure an even distribution of economic welfare between different parts of the State.

(c) The object of all planning is to improve the standard of living of the masses. This demands that the State must see to it that labour is not exploited. The Factory Act and the Workmen's Compensation Act, recently passed, will be enforced vigorously. The State will first use its influence and then, if need be, legislate in order to secure for industrial workers a fair wage, decent conditions of work and life, and a reasonable security of tenure. The State will specially help in the provision of proper housing. To those dulled by the opiate of 'kismat', unemployment and health insurance schemes, even for industrial workers may appear as unpractical. But it is hoped that the bigger industrial concerns will consent to try experimental schemes of such insurance in which the employees, the employer, and the State would contribute.

7. Industrial education.

No facilities exist at present in the State for technical training. A continuous flow of trained technical personnel is essential for industrial development. The plan, therefore, provides for the establishment of the following:—

(a) Cottage Industries Institute, Jaipur.

(b) Technical Institute, Jaipur, with diploma course in mechanical, electrical, automobile, and radio

engineering. This will train among others, a large number of ex-soldiers, especially those with some technical qualification.

(c) Civil Engineering School at Jaipur.

(d) Engineering College at Pilani. It is expected that the Birla Endowment Trust, who have already an institution and workshop for mechanical and electrical training at Pilani, will meet the expenditure for raising this to a degree standard.

(e) Compositors' and Pressmen Class.

(f) Ten technical scholarships for study in India.

(g) Six foreign scholarships for study of technical and industrial subjects.

6. Rural Industrialisation.

Definite efforts must be made to promote industrialisation in rural areas, particularly with the help of hydro-electricity. It is only a dispersed or "a widely spread industrial structure that can be integrated with agriculture." This will help to absorb the surplus of agricultural labour or maintain a class of half agricultural and half industrial labour, as in Belgium and Czekoslovakia. The medium and small scale industries, which particularly suit the State for this purpose, are oil, flour, dal splitting, and sugar mills; soap factories, power loom weaving, both cotton and woollen; small engineering workshops for agricultural and cottage industries; manufacture of brassware, felt, *bidi*, paints, sand paper, abrasives, scents, cutlery and bricks. Rs. 50,000 have been provided by way of Government subsidies for this purpose. Also agricultural industries such as cattle breeding and dairy farming, sheep and goat rearing, gur and palm jaggery, hand ginning should

be improved with the help of the different departments concerned, and organised as far as possible on a co-operative basis for credit, production and marketing. This ruralisation of industries should help in improvement both in the standard of living, and technical efficiency in the country side.

A long time ago was made a two thousand year plan. That Hindu Plan embraced all aspects not only of economics, but of life. Much of it is now derelict. Not so its cottage industries.

9. Cottage Industries.

But one school of thought sees no further use for them. The Roy Plan says "Any considerable use of the cottage industries cannot be reconciled with the spirit of the plan, which is to open up for the people a prospect of continually improving standards of living". Others, and not all Gandhian, regard self-sufficient village communism, based on cottage industries, as the chief means of restoring human values in production. "Cloth is dear, which saves a few annas to the buyer, while it cheapens the lives of the men, women and children, who live in Bombay Chawls. (Young India, 6-4-22)". "Socialisation must fail as a remedy, because it does not treat the real disease, which the factory system has inflicted upon mankind". (Borsodi. "The Ugly Civilization.") Again we must bring to bear a strictly practical attitude in the matter. What is the present reality? In this State, the most varied and numerous cottage, and small scale industries are the principal source of livelihood of over three lakh persons. Included among these are handicrafts, whose artistic excellence flows from the joy of creative work felt by generations of

local artisans. The chintzes, "choondries," "safas," the 'tie and dye' printed fabrics, 'salma' embroidery, lace and gota kinari, carpets, felts, embossed and engraved brassware, silverware, marble statues and images, ivory and stone carvings, precious and synthetic stones, jewellery, lacquered bangles, and papier mache toys vie with each other, in exquisite workmanship and design. Recently several of these handicrafts have fallen on evil days, as their comparative inefficiency cannot withstand competition with machine-made produce.

Even from a strictly economic point of view, it would only make matters worse, if these workers have to abandon their present occupations. Too much must not be expected from industrialisation. Mass production needs a lot of capital, but little human labour. So far our factories and mills have engaged only about 30,000 labourers. This number can be multiplied ten to fifteen fold in the next five years. But should we because of this drive two to three lakh cottage workers to unemployment. There is another aspect of the question. Some of these cottage industries, such as cotton and wool spinning, basket and rope making, together with agricultural industries provide subsidiary occupation for vast numbers of our agriculturists. Our object must be to see that almost every cultivator, who has not adequate land, has a subsidiary occupation. Further, we intend, as an aid in solving unemployment, to encourage more persons in the rural areas to take to cottage industries as their main source of livelihood. Such cottage industries will be either independent or linked to the medium and small scale industries, to be encouraged in rural areas. The Japanese model in this respect is well-worth

ollowing. "There 60% of the industrial population ain their livelihood in a multitude of small undertakings employing not more than 5 workmen apiece." (G. E Herbert "Industrialisation in the East And Its Effects On The West") "Wherever a large factory is erected, it soon becomes surrounded by multitudes of small workshops, which perform subsidiary processes". (G. C. Allen, "Japan, The Hungry Guest").

In Japan, as in our country, capital is not so plentiful and cheap as labour. We, therefore, propose to help all such cottage industries, which have vital qualities Appendix V includes a list of the existing cottage industries, showing which are capable of development and extended use as a subsidiary occupation, and which are amenable to cooperative organisation etc. Our plan, therefore, provides for the following specific measures of helping the cottage industries:—

(a) A Cottage Industries Institute is being started at Jaipur. Several of the utilitarian handicrafts will be taught with the help of improved appliances and methods. The artistic handicrafts will continue to be taught by the Arts and Crafts School. The Institute will also maintain a store of raw materials and appliances, not only for the use of its pupils, but also for the benefit of artisans also. The Institute will teach primarily the sons of artisans but as a temporary measure, demobilised or disabled ex-soldiers will also be taught here.

(b) The State Central Workshop will devise and manufacture improved appliances. This workshop will be attached to the technical institute to be started in Jaipur.

(c) Peripatetic demonstration parties will tour and teach artisans at their houses the use of such

appliances and improved designs and technique. This procedure has already started for some of the cottage industries Special attention will be paid to ex-soldiers who already know some handicraft.

(*d*) A Central Marketing Organisation will be set up immediately. This will supply raw materials to artisans, introduce better designs and improved *technique* and appliances, arrange for *sampling*, *grading* and standardisation of finished products, and above everything else arrange for their marketing, for which purpose new markets outside the State will have to be explored, and an Emporium maintained at Jaipur City. Rs. 25,000/- have been provided for the expenses of this organisation in the first year, but later it should not only pay for itself but earn a profit. The work of this organisation will have to be co-ordinated very closely with that of the Co-operative Department in a manner, which has been detailed under the head 'Co-operation'. That such an organisation can be of supreme help to several of the cottage industries is borne out by the example of what has been done by the All-India Spinners Association within this State. Four years' ago they organised *hand* spinning and weaving of cotton in Govindgarh, Chomu and Samode. At present this Association and about 25 private concerns, which have come into existence, provide cotton to the spinners, and get the yarn woven by the *hand loom weavers on perhaps a unique scale for* almost three-fourths of the women and children in these towns are engaged in spinning on ordinary charkhas, and there are about 1,400 weavers. The Association and these 25 concerns bleach and finish the cloth and then export most of it outside the State. The worth of the khadi exported from these towns averages

over a lakh a month. The proposed Central Marketing Organisation should be able to achieve similar results both for cotton and woollen spinning and weaving, and for several other cottage industries such as brassware and artware. Special attempts should be made to induce agriculturists, or their wives to take up cottage industries, such as cotton and wool spinning, and to give them the advantages of this Central Marketing Organisation.

10. Organisation.

(*a*) An Industrial Committee composed of representatives of government, industries and commerce has just been set up. This will be consulted on all matters of policy regarding industrial development.

(*b*) Later on similar district committees will be started.

(*c*) We will try experiments with the organisation of a few regional village committees of the type suggested by Sir M. Visvesvarya in his 'Village Industrialisation". The purpose of such committees will be to group five or six villages, so that they may devise and take coordinated measures for advancing their industries and other development. Ordinarily village panchayats will elect representatives for serving on this committee.

(*d*) An Employment Bureau will be set up immediately under an officer of the Industries Department, specially trained for this purpose. This will particularly help ex-soldiers to secure suitable employment in industrial concerns and government services of all grades, in which 50% vacancies that occured during the war are already reserved for this purpose. The Bureau will work under the control of the Soldiers Resettlement Officer.

11 Exhibitions and cattlefairs.

Industrial and agricultural exhibitions and cattle fairs will be held in Jaipur City and districts. A permanent exhibition court is being made in Jaipur City. The cost has been included under the provision for "Improvement of Jaipur City" under the head "Local-self government and improvement". Rs. 50,000 has been provided for such exhibitions and fairs. Most of these generally pay for themselves.

VI.—COOPERATION

1. Training of staff.

In spite of our best efforts we have so for succeeded in getting only three Inspectors and five supervisors trained outside the State. At this rate our progress in cooperation will be very slow. We, therefore, propose to start a training class within the State for training the following cooperative staff:—

12 Inspectors.

50 Supervisors.

10 Auditors.

Rs. 30,000/- have been provided for this purpose.

2. Agricultural Co-operative Multipurpose Societies.

In the history of cooperation in India, the slogan first was for concentration on credit societies. Then the tendency became to multiply different non-credit societies of the same cultivators, each for a different purpose, a marketing society, a seed society, a better living society. This history must not be repeated. We must straightaway start agricultural multipurpose societies. This will grant credit. But the credit must be linked to marketing. The members should be granted loans, only on the condition that they sell their produce through the society. Thus the limited liability of these multipurpose societies will not be a handicap. Also credit must be better "controlled" than is usual, as has been successfully done in several districts in Madras from 1936-37. Further, loans for production purposes could take the form of improved seed, manure, implements. As a rule, the same society could, also organise cooperatively the supply of producers requirements to its members.

4. Apex Bank.

An Apex Bank at Jaipur will help to procure capital required to augment the resources of societies. If necessary, the State will share in capital and management. This Bank must be the instrument for securing that different kinds loans given to members are classified and tr separately, and that the scheme of collection is on methods that suit local conditions.

5. Cottage Industrial Societies.

The cottage industries' workers are the cou part of our cultivators in two ways. Firstly, the are in the grip of mahajan-financiers, in several Secondly, they are at a considerable disadvanta marketing. Most of our cottage industries need organised into cooperative societies. These also discharge several function:—

(a) The society should provide loans on easy terms security of equipment, and finished products, provide products are sold through the societies.

(b) The society should arrange for the bulk purch supply of much of the raw material.

(c) The society should as far as this may be feasi the finished products through the Central Marketing sation, outlined under the head of "Industries".

(d) The society should get the goods manufactured the samples and specifications, where these are given by th tral Marketing Organisation.

For sometime to come it is desirable that the central marketing organisation remains under the control of the Industries Department. They have or could acquire the technical knowledge and staff required for this purpose, much more easily than the Cooperative Department. It is proposed to start 150 societies of cottage industries, rural and urban, with four industrial stores.

6. Agricultural subsidiary societies.

Milk and ghee production, cattle breeding and sheep rearing are the agricultural subsidiary industries amenable to cooperative organsation. The primary societies of milk and ghee should later on be developed into unions. Also there should be a ghee grading station in Jaipur City. Modern equipment such as cream separators and ghee boilers are economically advantageous for the making of ghee. It is as a rule only a cooperative society that can afford to buy these. The ghee and milk societies should be organised as a rule only in compact areas where those products abound. A start will be made with "ghoshies" and ghee producers in and round Jaipur City and in Khandar area.

VII.—EDUCATION

In India, once, the scholar counted for more then the administrator. Then Taxila, Nalanda, Navdvipa and Mithila sent out youth filled with the love of learning. In the last 150 years, all power and glory has been that of the administrator. The result has been an educational system, which has prepared not for culture and citizenship, but for crams, and crumbs of office. This has been so at every level. The village primary school has been a slough of listlessness, entirely unrelated to the world in which the children live, move and have their being. The secondary school has idolised examinations, but desecrated the high spirits, and fertile imagination of youth. The University has been more a back-wash of learning than a fount of vigorous and independent though. The lesser the vitality, the greater the imitativeness. So, till the scheme of basic education, with which is associated the name of Mr. Gandhi, hardly any original attempt was made to reconstruct our educational systems. We remained content with ideas borrowed from other countries, about half a century later than their vogue. When compulsory and free education was introduced in western countries over half a century ago, in India, the authorities talked of the "filtration theory" which suggested that if we educate the *classes*, knowledge would *filter down* to the masses. The question that is troubling advanced countries now is a different one. "Can democracy survive when the mass of its members cease to be educated just at the point where knowledge begins to exercise its fascination? (Laski's "Reflection on the Revolution of Our Time".)

So when several countries have made secondary education compulsory, the chief problem for us is the rapid extension of primary education. Our technical education, like our industrialisation, is still in the embyonic stage. Our education needs not only a vast extension but also a reconstruction.

1. Universal primary education

Our literacy figure is	5.3%.
Males	9.4%.
Women	·85%.

According to the 1941 census, there were the following children between the ages of 6 to 11:—

Boys	1,91,408
Girls	1,73,497
Total	3,64,905

In August, 1944, the numbers of such children at school, State or private, were as follows:—

Boys	70,266
Girls	6,962
Total	77,288

This means that we have to provide primary schools for another three lakhs of children. Taking an average of 45 pupils per primary school, roughly 7,000 more primary schools are required in order to make primary education universal. So far we have roughly over 1,000 primary schools. The Sargent scheme suggests the attainment of universal primary education in 40 years. We should try to achieve it earlier, if possible. But the rate of progress will have to be much slower in the next five years, than later on. In the next five years, it is doubtful if we can start more than about 200

primary schools per year, as we cannot produce teachers for a larger number We have three training schools, for training teachers of all categories, excepting the Bachelor of Training We will start one more school for training primary school teachers. Such training institutions could easily be multiplied but there will not be enough pupils. As a result of the recent conversion of a large number of vernacular middle into anglo-vernacular middle schools, the number of vernacular final passes has fallen from about 800 to about 350 in the last two years. Of these only 40 to 50 are girls. As our primary school teachers will be trained vernacular finals, it is clear that in the next five years, at the very outside about 280 primary school teachers could be trained annually. During this period, we will open a number of new vernacular middle secondary schools. The products of these new schools will pass out after three years. Their training will take one or two years. Thus, it is after the next five years that we could open a very much larger number of primary schools every year, so as to provide universal primary education for boys in about 20 to 25 years from now, and for girls in a little longer period. On the extension of primary education, the plan proposes an increase of expenditure from the ordinary State revenues in 5 years as follows:—

Rs. 18 lakhs recurring expenditure, and
Rs.11 lakhs non-recurring expenditure.

This will cover the recurring cost of opening 150 primary schools every year. The estimate of the non-recurring expenditure is explained a little later under the head of "Buildings". It is hoped that another 50 primary schools per year could be provided for by a cess, which it is contemplated to levy in such areas

where compulsion is introduced. For this purpose a Compulsory Primary Education Bill has just been prepared. The cess must be leviable both in khalsā and non-khalsa areas.

Apart from everything else, compulsion is the only means of remedying the awful wastage that takes place in primary education. Only 8% of the pupils, who join a primary school, finish the full primary course, i.e., a wastage of 92%. Compulsion will be introduced in selected areas, both urban and rural. The question of the age and period for which education is to be made compulsory is of the utmost importance. The report of the Central Advisory Board of Education, 1944, recommends that from the start primary education should apply from the age of 6 to 14. As a result of experience, most educationists are agreed that compulsion for 4 years only, between the ages of 6 to 11, does not really serve its purpose. However, before a final decision can be taken about this public opinion will have to be consulted.

2. Extension of secondary education.

It is proposed to start 50 new secondary schools in the 5 years, in order to maintain the ratio of one secondary school for every ten primary schools. This will involve an increase of five lakhs in recurring expenditure and five lakhs non-recurring expenditure.

3. Re-construction of primary and secondary education.

All educationists are agreed that the old-fashioned primary school must be scrapped. Instead of merely teaching the three R's by passive methods, it must be integrated with life which is "practical, pragmatic, and constructive". As a result of primary education, the village boy must become a better farmer, or craftsman a better citizen. There may be differences of opinion as to how exactly this revolution is to be effected,

but it is clear that diece meal changes and modifications in the existing system will not do. The system of basic education demands that education should centre round some basic craft, to which the teaching of all other subjects must be co-related. "Such an approach to the unlocking of the child's mind and creative powers is more effective and fruitful, not only because it enlists the powerful supports of his instincts, but also because it offers opportunities for cooperative and group work in school, and thus establishes lines of liaison between life in school and outside". We have had 20 of our teachers trained in the basic system at Agra and Allahabad Training Centres, and this system was introduced in ten of our schools in 1943. A notable part of the original system is that should pay for itself. Several edcuationists doubt if it ever can fully do so. But even if it can pay for a substantial portion of the cost, it will help very considerably in universalising primary education.

(b) So far, the crafts introduced in our basic schools are paper cutting, card-board work, spinning and gardening. In this State, with its glorious traditions of handicrafts, it should be possible to teach more of them in these schools, varying according to the locality. As steps in the right direction, we have already introduced handwork, such as paper-cutting, clay modelling, "takly" spinning in our primary schools, and in all secondary schools, a practical subject has been made compulsory. Secondary school boys have to take up one of the following subjects:—

Carpentry,
Tailoring,
Cotton spinning and weaving, or
Agriculture.

Secondary school girls must take up domestic science, including cooking, sewing, laundry and nursing. Steps will be taken to improve the teaching of crafts, both in the basic and other schools, by getting the teachers to take an intensive course in the proposed Cottage Industries Institute. They can conveniently do so during the summer vacation. Also the proposed Central Marketing Organisation of the Industries Department will be utilised for sale of the school products.

(c) Experience shows that the single teacher primary school is not at all successful. It is proposed to gradually eliminate such schools, which number 170 by the two teacher schools. The new schools will be provided with two teachers as soon as possible.

(d) The scale of pay of primary school teachers have just been revised as follows:—

P.T.C. Rs. 20-1-25 to 25-1-30. This does not include dearness allowance.

V.T.C. 25-1-30 to 30-1-35. " "

It is hoped that the new scales will help in recruiting.

(e) In recent years co-education in primary schools has made some progress with the result that about one-fourth of the number of girls in primary schools are receiving co-education. Co-education will be encouraged but only in the smaller villages, where the numbers of boys and girls are not large enough to justify separate primary schools. In other places the schools will be separate. Primary or secondary schools for girls wherever there is the expectation of a sufficient number of pupils will have priority over other institutions of the same category.

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(*f*) Of the fifty new secondary schools that will be started, ten should be high schools. Of these at least 3 will be Technical High Schools of the type suggested by the Report of the Central Advisory Board of Education, 1944. These will be located in towns, other than Jaipur, which are to have considerable industrial expansion, like Sawai Madhopur. Only a few such technological subjects will be taught, as will specially fit the pupils for local employment. Some of the pupils, who pass out from these Technical High Schools, will be encouraged to join the Technological Institute, which will be started in Jaipur City in order to give advanced training in a large variety of subjects.

(*g*) Small agricultural farms are attached at present to only 2 schools. Nine more such school farms will be set up. In schools, having such farms, agriculture will be introduced as an optional subject. Students, who pass out from such secondary school, could go on to the Agriculture School to be started in Jaipur City.

(*h*) The Maharani Gayatri Devi Girls' High School has been a notable success, and will be developed further as a model school on advanced lines.

5. Higher Education.

A Medical College, a Mechanical and Electrical Engineering College and an Agricultural College have been proposed under the different departments concerned. The Maharaja's College already has co-education but a separate Women's Degree College is necessary. It is hoped to start this from 1946. With all these institutions in the State, it should be very feasible to start in two or three years a University of Rajputana with its centre at Jaipur. This may be of the affiliating type. The plan provides for the necessary funds.

Adult education in India has not yet become adolescent. The mass literacy movements started in British India have not made much progress. The problem has to be tackled with by the State, with far greater vigour than in the past, if the blot of illiteracy is to be eradicated. It is proposed to start a 100 adult schools every year. Most of these will be put in charge of regular school teachers on a voluntary basis.

6. Adult Education.

They will be paid a bonus of Rs. 4/- per adult male literate. For urban areas, whole time staff will have to be employed. Panchayats and large industrial concerns should also help in adult education.

Public Libraries and reading rooms should exist in all towns and almost all villages, if the literacy secured by adult education is to be maintained. Government have recently started libraries and reading rooms in 18 towns, libraries in 37 villages, and 5 reading rooms in Jaipur City. Also a Children's Library and Play-room has been added to the Maharaja's Public Library in Jaipur City. Government propose to establish 100 more libraries and reading rooms in towns and villages. It is also expected that more such institutions will spring up in the future, entirely through the efforts of Municipalities, larger Panchayats, thikanedars, and other public spirited individuals

7. Public Libraries and Reading Rooms

The revival of the indigenous theatre, folk dance, and community music will be fostered not only through village schools, but also panchayats. It is common experience that such activities, and organized games, do more than anything else to create that corporate spirit, which alone can make

8. Cultural advance.

panchayats successful. Maharani Kishore Kumari Sangeet Nritya Niketan School of Indian Music and Dancing has been very successfully started in Jaipur City, and will be developed further. These subjects will also be introduced later on in selected schools and colleges.

Health of School Children.

The report of the Central Advisory Board of Education, 1944, aptly states that in India the problem of the health of school children has special features arising from the poverty and ignorance of the masses, and low hygienic standards, both personal and public. So far the arrangements made are totally inadequate and unsatisfactory, it is proposed to appoint 8 School Health Officers, 2 of whom will be women. In addition, Medical Officers-in-charge of rural dispensaries will continue to inspect the health of school children at their headquarters, and in the neighbouring villages. Experience in other countries shows that routine inspections by Health Officers of all pupils every year is out of proportion to the results obtained. The Central Advisory Board of Education have suggested that it would be enough if teachers make the routine examination of the weight and height of pupils twice a year, and point out abnormalities to the Health Officer, so that he could concentrate on the treatment of the defects revealed. The school Health Officer can himself treat simple errors of refraction and simple diseases. For the rest, he will have to refer the pupil to the neighbouring hospital. Special hours will have to be fixed in these hospitals for treatment of school children, as otherwise they have to incur much trouble and waste of time. The teaching of First Aid and Hygiene has to be improved considerably. Games and scouting

have to be made much more popular than they are at present. In the matter of promotion, we will give clear preference to teachers, who have really looked after the health and the physical activities of the students. Provision for inspection of the health of schools has been made under the head of "Public Health".

9 Private expenditure.

That the people of this State are more than usually keen on education is shown by the immense private munificence which it has already called forth. The Birla Education Trust is perhaps the largest of its kind in India. Its educational institutions have converted Pilani from a desert into a city of palatial buildings with a canal round it. The Trust maintains a degree College, a High School, a Girls High School, 2 Montessori schools and a large dairy farm at Pilani. It also finances as many as about 400 primary schools. Private sources bear most of the expenditure of 1 degree college at Nawalgarh, 2 intermediate colleges including the one for girls at Vanasthali established through the devoted labour of Shrimati Ratan Shastri, and public contributions, and 23 high schools in this State, besides secondary and primary schools. The total private expenditure on education in 1943-44 amounted over 9 lakhs. Of which the Birla Trust contributed over 3 lakhs. The Government and the people of Jaipur have reason to be grateful to the Birla Trust, and to those others whose generosity is responsible for this expenditure This also fortifies our belief that the education cess will be paid very willingly for the introduction of compulsory primary education in the State.

10. Primay & Secon-

The deplorable heritage of the past is that most State primary schools instead of having buildings of

their own, are housed in 'dharamshalas', temples, hired or lent buildings. In Jaipur, the City of palaces and mansions, primary and secondary schools, instead of being the minor temples of learning, with one or two exceptions are housed in buildings distinguished only by being thoroughly cramped, ill ventilated and ugly, and they—both boys and girls schools—neither own nor have the use of any play-grounds. All this bitter neglect of decades will take time to remedy but we must do the best we can in the next five years. A separate provision of five lakhs has been made for immediate improvement of existing school buildings, primary and secondary all over the State and the provision of play-grounds in Jaipur City. Secondly, it is proposed that every year 200 primary schools should be provided with kachcha pucca buildings at an average cost of Rs. 1,000/- each. The non-recurring cost of 11 lakhs provided for the extension of primary education thus covers 10 lakhs for this purpose. One lakh is for equipment of the 750 new primary schools, which are to be opened from the ordinary revenues of the State during the five years. Thirdly the primary education cess, which is expected to start and finance 250 primary schools during the same period, should be levied at rates whice suffices to cover the cost also of buildings and equipment required for these schools. Thus it should be possible to provide during these five years, proper buildings not only for all the new primary schools to be opened, but also for about 250 or a quarter of the existing primary schools.

11. Education of backward communities.

Efforts have been made not wholly without success to get Harijan boys admitted in ordinary schools. These efforts must be intensified to the

fullest degree. Nevertheless, for a few years to come, perhaps the interests of this community may require separate primary schools for their boys and girls. As many of these as may be wanted will have a priority over general primary schools to be opened every year, second only to new girls primary schools that may be required

Also one lakh of rupees have been provided for schoolarships for all stages and kinds of education, to be given exclusively to

(a) Harijans.

(b) Members of backward communities.

(c) Poor and deserving students.

For each category, girls will not only be eligible but be specially favoured.

12 Kindergarten Schools and special institutions.

It is in first seven years of a child's life that the battle for freedom and progress both for him or her and the country is won or lost To popularise kindergarten training, we must start five proper kindergarten schools in Jaipur City, and the larger towns. Provision has been made for training two Jaipurian women each year as kindergarten teachers. It is also proposed to start by way of experiments one or two workmen's Night Schools in *Jaipur City These may* be affiliated to the Technical School, so that the workmen can not only become literate, but receive higher technical knowledge in order to qualify for promotion. It is expected that the larger industrial concerns *will* co-operate wholeheartedly *in this venture.*

In the current year's budget, the allotment for Education is 17,20,000 while the total estimated ex-

penditure is Rs. 2,59,00,000 or a percentage of 9·95. This plan provides for an increase in the recurring costs under the head of 'Education', and for educational institutions included in the plans of other departments, aggregating to a total of Rs. 42,88,000 or an annual average of Rs. 8,57,600. With this increase, the expenditure on 'Education' would become 15·17 per cent of the same total expenditure as in the current year.

VIII.—MEDICAL RELIEF

There are 2 State hospitals and 8 dispensaries in Jaipur City, and 33 State dispensaries in districts. There are also 12 Thikana or private dispensaries in the districts. This gives one hospital for about 60,000 populations, which is grossly inadequate. The position is aggravated considerably by the fact that there are hardly any private allopathic practitioners in the districts. Therefore, apart from these dispensaries the rural areas have no means of medical relief other than *vaids* and *hakims* who are as a rule not qualified. The ideal would be to have a dispensary within 5 miles of every village or town. This would require 175 dispensaries. This ideal cannot be realised within 5 years, among other reasons owing to a lack of medical personnel. This plan proposes to increase the number of dispensaries in the State to at least 100 in the course of the next five years, and to adopt other ameliorative measures.

1. Training of personnel.

It has been decided to establish a Medical College in Jaipur and it is expected to start teaching from July, 1946. It will admit a maximum number of 150 students both men and women. We rely on a regular flow of students from other Rajputana States also. Also arrangements will be made immediately to train a sufficient number of female and male nurses, midwives and compounders at the Lady Willingdon Hospital and State Zenana Hospital. A Refresher Course for State Medical Officers will be instituted at the Lady Willingdon Hospital

2 Expansion and improvement in medical facilities

(*a*) All the district dispensaries are all ill-equipped and have insufficient accommodation. The dispensaries at the three district headquarters, other

than Jaipur City, will be converted into first class district hospitals with at least ten male and ten female beds, and adequate medical, and nursing staff.

(b) Thirty-five new second class State dispensaries will be started in Tehsil headquarters and towns with over two thousand population. It is expected that several new thikana or private dispensaries will also be established in the next few years.

(c) The Lady Willingdon Hospital and the State Zenana Hospital are first class institutions, but require some additions by way of buildings, which will be provided as soon as possible. Also three of the dispensaries in Jaipur City will be re-organised and provided as soon as possible with better qualified doctors and more subordinate staff, and subsequently inpatient wards will be added in order to admit the less serious cases and thus make more room in the two main hospitals for the more serious cases. The Lady Willingdon Hospital has 550 beds and the State Zenana Hospital 150 beds. This is quite inadequate. Funds have been provided for these purposes.

Women's medical relief.

It is a matter of the deepest regret that so far no arrangements have been made outside Jaipur City for the treatment of women. It is now proposed to appoint women graduate doctors at the 3 first class district dispensaries, and 25 graduate or licentiate women doctors as a rule at second class district dispensaries, or in exceptional circumstances at women's hospitals to be built separately. It is better to appoint a large number of these women doctors and get them to start work in the existing dispensaries, rather than

start a limited number of separate women's dispensaries in the rural areas. Quarters will be built for these women doctors, and additions and alterations will be made to existing dispensary buildings. Also women nurses will be appointed in such dispensaries as have women doctors. These women doctors will also control and supervise child-welfare and maternity work of midwives, who will be appointed to work in rural areas, as indicated under "Public Health". This will obviate the necessity of appointing Health Visitors for supervision of child welfare work. This will not only make for economy, but also prevent the lack of co-ordination between women's hospitals and child welfare and maternity workers, which is a common experience in several of the British Indian provinces.

4. Tuberculosis.

There is a Tuberculosis Sanatorium near Jaipur City, but it has no free beds. A hundred bedded free ward for poor patients will be added to it. A start is to be made immediately. A.T.B. Clinic will be started at once in Jaipur City, and three such clinics will be added at the district headquarters.

5. Ayurvedic and Unani systems.

Ayurvedic and Unani systems still command a large measure of public confidence, are comparatively cheap. It has, therefore, been decided to start Ayurvedic and Unani dispensaries in rural areas as an experimental measures. 25 Ayurvedic and 5 Unani dispensaries will be started in such towns or villages as are at a distance from the existing State dispensaries. Further, it is proposed to improve the teaching in Ayurvedic and Unani systems of medicine. Ayurvedic medicine, at present, is taught in a section of the existing State Sanskrit College, which is very

unsatisfactory, while there is a separate aided Unani Tibbia College. It is hoped to establish a separate Ayurvedic College within the next two years. Also the aid to the Unani Tibbia College, which is very meagre, will be increased.

3. Subsidised Medical Practitioners.

As it will take about ten years to have a dispensary within five miles of every town or village, it is necessary to subsidise qualified medical practitioners, allopathic, and indigenous, to settle in rural areas, not served by dispensaries. The subsidies will vary according to the system of medicine, and qualifications, and it will be paid for the first few years only, during which time the practitioners should be able to establish themselves. In the next five years it should be possible to subsidise twenty such practitioners. The additional advantage in subsidising allopathic practitioners will be that they will be utililised for health work in the neighbourhood, particularly at the time of epidemics, and for inspection of the health of school children.

7. Medical Legislation.

The Jaipur Medical Act, 1943, and the Jaipur Ayurvedic and Unani Tibbi Practitioner's Act, 1943, will be enforced immediately. These provide for the compulsory registration of qualified medical practitioners. There is also a provision under which those not registered under one of these Acts and not in regular practice on the first of September, 1943, of any recognized system of medicine, or surgery, will be debarred from practice.

IX—PUBLIC HEALTH

OUR towns and villages are dung heaps, which are the "microbes' paradise". Naturally, our expectation of life is about one-third of advanced European countries, and one-half of Japan Not only is the death rate very high, but the standard of health of the masses is very poor. A rapid drive is required in all aspects of public health work.

1. Staff and statistics

Ten Jaipurian Medical Graduates will be given stipends for acquiring the Diploma of Public Health. Also ten Jaipurians will be trained as Sanitary Inspectors. All of them will have to serve the State. A Public Health Institute will be set up. This will prepare sera carry out analysis of food and drugs, and train staff. A Vital Statistics Bureau will be established immediately. A Births and Deaths Registration Act, applicable all over the State, is to be enacted shortly.

2. Travelling Health Units.

A Health Officer and an Assistant Health Officer have been appointed for each district but their work will have to be supplemented by 10 travelling health units, one for each Nizamat. These will carry out *anti-epidemic*, and other health measures, and also render elementary medical relief in areas not served by dispensaries.

3. Anti-Malarial Survey and Works.

One Malarial *Officer and twelve trained* Malarial Surveyors will be appointed. Six of the latter have already gone for training. These surveys will have *to be followed* up by large scale anti-malarial works, such as filling up of insanitary tanks and ponds, and drainage works. 10 lakhs have been provided for such works. Sale of quinine, or quinine substitutes,

will be arranged for in every town and village in the State This has already been started in a large number of towns and villages. Also, a large reserve stock of quinine or quinine substitutes will be built up, so as to be available for free distribution during epidemics.

4. School Health Inspection.

Eight School Health Officers, including two lady doctors will be appointed for the inspection of the health of the school children and treatment of common ailments. The services of the Medical Officers in charge of the smaller rural dispensaries and of subsided allopathic practitioners will also be utilized for this purpose in the towns or villages, in which they reside and the neighbourhood.

5. Epidemics

In Britain, medical and public health staff are both subordinate to the Ministry of Health, while in India, they are under different departmental heads. This had led to a lack of coordination between them, the results of which have been most adverse in dealing with epidemics. Both in British Indian provinces and in States, only the one or two Public Health Officers in a district have had to combat with plague and cholera outbreaks, while, as a rule, the Medical Officers-in-charge of fixed dispensaries, who number six to ten times more, have not been utilized for this purpose. The result in this State, as elsewhere, has been that such epidemics have generally been dealt with, several days after the worst has been done. This state of affairs has just been altered by new epidemic rules that have been framed, according to which reports from the revenue staff go straight to the nearest Medical Officer, and he proceeds at once to deal with outbreaks, pending the arrival

of the Health Officer. Further steps, will henceforth be taken to distribute in advance in rural areas, medicines and disinfectants required for dealing with cholera.

6. Child Welfare and Maternity.

(a) The number of Child Welfare, and Maternity Centres in Jaipur City will be increased from three to thirteen. Within their much smaller circles, the midwives in charge of these centres will be expected to establish close contact with the poorer women. Their work will be supervised, by a lady doctor who will also be in charge of a maternity hospital, which will be set up in order to relieve the overcrowding of maternity cases at the State Zenana Hospital. This Maternity Hospital may be started with 50 beds but should be capable of considerable expansion in the future. There will be in addition to the lady doctor incharge, sufficient medical and nursing staff at this Hospital as indicated in the appendix. It will be the duty of the midwives to induce all abnormal maternity cases to go atonce to either the State Zenana Hospital or this Maternity Hospital. The Child Welfare and Maternity organisation will have one or two motor ambulances for the speedy hospitalisation of their cases. Each Centre will have a well equipped clinic, at which in addition to the midwife in charge, the lady doctors in charge of the Maternity Hospital will attend on fixed days and hours, and help in the health examinations of women and children and treatment of ordinary ailments. Thus the lady doctors incharge of the Maternity Hospital should be able to win the confidence even of the more ignorant and conservative women.

(b) It will be one of the duties of the midwives incharge of child welfare and Maternity Centres, both

in Jaipur City and in the districts to help in the training of indigenous dais in elementary aseptic methods. Where the numbers justify this, special arrangements for their training will be made in maternity or Women's Hospitals. Legislation will be introduced later to make it penal for indigenous dais of such places, which have been provided with local arrangements for such training to conduct maternity cases unless they have taken advantage of it. Suitable stipends will be paid to these indigenous dais during the period they are under training. A census of such dais will be arranged immediately.

7. Vaccination.

There are only forty-five vaccinators in the entire State and unfortunately all of them hail from Jaipur City, with the result that they are generally absent from their circles during the non-Vaccination period of about seven months Naturally, the Jaipur Vaccination Act, 1943, which makes vaccination compulsory throughout the State, has remained largely a dead letter. Fifty-five more vaccinators, all from rural areas, and four superintendents will be appointed as soon as possible.

Publicity.

It is only publicity that can soften the defences of ignorance and indifference, so that the attitude of the people themselves may change. For this purpose, the Publicity Department will start a Hindi and Urdu illustrated fortnightly or monthly journal, combining local news, with propaganda relating not only to public health but other spheres also. Instructions to panchayats will be communicated through this paper. Further, two publicity motor vans, equipped with cinemas, will be utilized. These will carry out health propaganda, treat simple ailments,

and when possible transport serious cases to neigh bouring dispensaries

(a) A Leper Asylum will be opened in Jaipur City in order to enable the segregation of lepers The buildings are under construction. An experienced leprosy specialist will be appointed immediately in order to train over medical officers in charge of district dispensaries in the detection and treatment of leprosy particularly in the earliest stage, when it is much more amenable to cure than later. Special publicity measures will be undertaken to spread knowledge in both rural and urban areas about the earliest symptoms and the good chances of cure of the disease if treatment is availed of without delay.

9. Special Institutions.

(b) Three new Skin, Veneral, and Infectious Diseases' Hospital will be opened in the three district headquarters. These is already one in Jaipur City and this will be provided with new buildings.

X.—ROAD AND BUILDINGS

1. Training of technical personnel.

THE following are being sent immediately for training outside the State:—

Two candidates	...	Civil Engineers
One candidate	...	Sanitary Engineer
Two candidates	...	Shift Engineers.
Four candidates	...	Overseers

Under the head "Industries", the various engineering and technical institutions proposed have been outlined. These include a Civil Engineering School at Jaipur. This, however, will train overseers only. The higher staff will continue to be trained outside the State.

2. Roads.

The State has 580 miles of metalled, and 300 miles of unmetalled roads. It is proposed to add 629 miles of metalled roads, as detailed in the statement. The programme is fairly distributed among all the four districts, but is heaviest for Jhunjhunu district, as this has been comparatively neglected in the past. The objectives in drawing up the programme have been as follows:—

(a) To join villages to important business centres;

(b) To facilitate the large scale industrial development to be carried out immediately in Jaipur and Sawai Madhopur districts;

(c) To help in the development of cottage industries, and fruit and vegetable cultivation;

(d) To help in the ruralisation of small scale industries;

(e) To open up valuable mines and quarries.

3. Bridges & Culverts.

3 During the rainy season traffic on almost al roads in the State is interrupted for hours, whenever there is heavy rain, because of the general absence of bridges and culverts over many streams and Nallahs.

This needs to be remedied without any delay. The plan provides for the construction of nine high level bridges, as detailed in the appendix including one for Banas river on the Jaipur-Sawai Modhopur road. The total cost of these nine bridges is estimated to be about 15 lakhs of which we expect grants form Government of India of at least 5 lakhs since five of the bridges will be on roads of all India importance. Another ten lakhs have been provided for submerged bridges and culverts on the smaller hill streams and nallahs which abound in large parts of the State.

4. Government Building.

Costs of the large number of buildings proposed for the various departments dealt with in this note have been included in the relevant plans. But apart from schools and colleges, hospitals and the various other institutional buildings covered by those departmental plans, a large number of other buildings were or are still required immediately, largely as a result of the recent constitution of the four districts under Deputy Commissioners and the usual other staff. The majority of these have already been completed or taken in hand. In the last three years, over 30 lakhs were spent on the construction of Government buildings. But much still remains. New buildings are required in Jaipur City for the High Court. some suboridinate courts and departmental offices. Requirements by way of courts, offices and residential quarters, already taken in hand for the three new district headquarters have to be completed. At Sawai Madhopur these are to be built within the new town that has been laid out. Also many of the existing sub-jails have to be scrapped, and replaced either by new buildings, or by a smaller number of district jails.

5. Temporary technical staff and labour required.

The plan shows against the bigger items of road construction the technical staff that will be required. These total up to a large number. But as all the roads will not be constructed simultaneously, actually a much smaller number will suffice. The majority of these will have to be recruited temporarily from outside. The unskilled labour will be available easily, and an attempt will be made to form a Civil Pioneer Force amongst the demobilized soldiers, under their own officers, to help in the construction of roads under the supervision of the higher technical staff.

. Indirect effect on employment.

Some economists think that the Bombay Plan is unduly optimistic in hoping that within 15 years the proportion of people engaged in industries can be raised to 26%, *i. e.*, more than doubled. Even in the U.S.A. only 27% of workers are engaged in industries. In any case, industries cannot do more than absorb some of the surplus engaged in agricultural production. It cannot provide employment for all. Thus in any plan of comprehensive economic development, not only must we develop industries, and improve the purchasing power of the agriculturists, but also increase the score of tertiary occupations, *i.e.*, trade, transport, and services. In the United Kingdom, and the U.S.A. such occupations engage 50% and 47% respectively of the population. Even more than public utilities, the development of roads and transport is the key stone to the increase of such tertiary occupations. "With the expansion of transport, trade will increase, especially distributive trade. Markets will then become active, new shopping areas will spring up, banking and financial agencies will arise. A great increase in employment will result from all this, and the effects will be cumulative. Not only unskilled labourers, but technicians of all kinds will be required and intellectual workers for management and clerical works."

XI.—RAILWAY

THE recent dvelopment of motor vehicle transport necessitates a reorientation of railway policy. Previously, it was considered necessary to build railways within 15 miles of every village. Now many branch line projects, which would have been justifiable when the bullock cart reigned supreme, would be a waste of money. The Government of India have now come to the conclusion that "new railways should only be built where a traffic survey shows that a road is unlikely to be able adequately to take care of the traffic". The main traget, therefore, of railway development in the future will be in "the intensive development of traffic on the existing lines, so as to give faster, better and if possible—though of this there are small hopes—cheaper service to the public, combined with better service conditions for the personnel of the railway services".

1. Extension of railways.

In accordance with these principles, the only new railway project is the Sanganer-Malpur-Banas River railway extension. This will invove a capital expenditure of 84 lakhs and should give a return of about 4%. It will serve some of the richest agricultural tracts in the State, and enable large scale industrial development of the area, particularly in the line of cotton mills, cement, and lime factories.

2. New stock.

The building of new coaching stock, and replacement of old stock have been provided for at a cost of 15 lakhs. The new third class coaches will provide more and better accommodation.

3. Amenities for third class passengers at railway stations

Some additions to such amenities have been made recently, but much more is required. Four lakhs have been provided for this purpose.

4. State Motor Transport Service.

It is now generally recognized that the efficiency of public transport as a whole, and the interests of the community require that both road and rail services should be controlled by a single authority. There are two ways of achieving this. The State may either secure the maximum coordination between road and rail interests by the usual methods of control of fares, routes and traffic, or the State may nationalise both the railway and the motor transport. Of the two alternatives, we have decided in favour of the latter. The State already owns the local railway, and will now organise its own motor transport system, to cover all the important roads, and operate this in coordination with the railway. It should be possible to employ a number of ex-service drivers in this organisation. The venture should yield a return of about 4%.

5. Railway Freights.

Railway freights will be revised in order to further the industrial and agricultural devlopment of the State. In this direction, the lead and real substantial help has to come from the Central Government by a revision of railway freights all over India.

XII.—LOCAL SELF-GOVERNMENT AND IMPROVEMENT

THE condition of our towns and villages reflect the inertia of centuries. Both are characterised by appalling insanitary conditions. Metalled roads, pavements, and drains are rarities in towns. In villages they do not exist at all. Several villages still do not have pakka wells. Others have "baories," which cause the terrible disease of guineaworm. Towns are congested and villages planless. Government has earnestly taken up the general sanitary improvement of towns and villages. A general grant of one lakh, and special grants were made for this purpose last year. A pipe water supply has been arranged for Dausa Municipality entirely at Government expense. All "baories" in tehsil Toda Rai Singh are being converted into draw wells at government expense. A Jaipur City Improvement Committee has recently been reconstituted. Town Improvement Committes have been set up in several towns under the chairmanship of Deputy Commissioners. Allotment of lands have been made for this purpose A few villages are being replanned, and land required is being provided free by the State.

1 Local self-gove ing bodie

Development, to be lasting and vital, must spring from the consent and the corporate efforts of the people themselves. Local bodies to a progressive State are what cells are to a living organism. A system of local self-government, therefore, has to be created at every stage.

(*a*) The Jaipur City Municipality has been reconstituted unber a new Act, with vastly increased powers, and an elected Chairman.

(*b*) Thirty-one new Town Municipalities have been created and have just started functioning, with the help of subsidies from the State, and the bigger thikanas. Both are considering the question of transferring some of their present sources of income to these new municipal bodies.

(c) A Panchayat Act has been enacted on the lines of the Mysore Panchayat Act. This invests panchayats with far more comprehensive functions and larger powers of taxation than similar bodies exercise in most British Indian Provinces. It is expected that at least a thousand panchayats will be established in the next five years, each panchayat comprising a town, a village, or a number of villages.

(*d*) In the near future, legislation will be undertaken to invest the Jaipur City Improvement Committee, and some of the more important Town Improvement Committee, with statutory powers, and wider representation than these have at a present. Experience elsewhere shows the necessity of getting the town planning and improvement work carried out by a statutory body other than the municipality.

(*e*) A Central Advisory Board with district branches was constituted in 1939, for bringing to the notice of Government the administrative needs of the people. Recently, the State Rural Development Board, with branches in the district, have been constituted, and have proved very useful. But it is recognized that we require statutory district boards to whom Government can delegate, to a substantial extent, it functions relating to nation building departments. In British India the statutory district boards have functioning for a considerable period, but ...

not achieved conspicuous success. One of the reasons for this is that the villages in British India are still without panchayats having such functions and powers, as constitute these into effective local administrative units and *corporate bodies* Our district boards should spring from, and be integrated into a vigorous system of panchayats all over the State.

2. Improvement of Jaipur City.

(a) The improvement of Jaipur City has *to be* worthy of its ancient beauty, its position as the metropolis, where live about one-fifteenth of the total population of the State, and which in addition to being the capital is the first city in almost every sphere of life, industrial, commercial, and educational. It must, therefore, be the spear head of civic advance, and the symbol of the State's progress. Improvement already carried out had first to be devoted largely to what are known as "external" schemes, the lay out of new residential, and industrial areas, the latter numbering as many as six pipes were not available owing to the war for more underground sewage than a total length of about two miles. The expenditure incurred in the past four years is as follows:—

	Rs.
Acquisition of lands and buildings.	15,00,000
Lay out of new residential and industrial areas, including roads, drains and *lighting*.	8,00,000
58 model workmen's quarters at about Rs. 2,000/- each	1,00,000
Underground sewage.	2,25,000
Paving of "rastas" or lanes	6,35,000
Other improvements.	2,40,000
Total expenditure	35,00,000

Income from sale of plots etc. already realised. 14,00,000

A large number of the lands and buildings acquired have been or are to be utilised for public buildings, parks, markets, and roads. Plots yet to be sold are expected to realise about ten lakhs. The lay out of the new residential and industrial areas will thus have largely paid for itself.

(b) The improvement schemes that remain are largely internal schemes of clearing congestion, and the more expensive items of sanitary improvement, which have yet to be worked out in detail, but may provisionally be outlined as below:—

(i) Clearance of slums & congested areass. Areas like Ghat Darwaza to Ganda Nala, Ramganj Chaupar to Gangapole Gate, Top Khana Des, Purani Basti are all foul spots unfit for human habitation. Five lakhs have been provided for clearing such areas. Compensation will be paid largely for buildings only, as almost all the land belongs to the State (Kucha Upar). The dehoused may be given first preference in any new residential plots that may be laid out, but most of these areas will be left open, as lung spaces, or playgrounds, or utilised for schools, child welfare and maternity centres, clubs, gymnasiums or public buildings. Most of the dehoused will be given plots, which are already being laid out, outside the City walls on most sides.

(ii) Sweepers' quarters. It is necessary for the State to build as soon as possible suitable

quarters for sweepers, both municipal employees and "customary." The special reasons for this are indicated later. The model workmen's quarters, which have been built, have two living rooms and cost about Rs. 2,000 each. Sweepers quarters, mostly each with one living room, should cost about Rs. 1,000/- each. Five lakhs have been provided under this head.

(iii) *Workmen's quarters.* The 58 model workmen's quarters already built have been occupied, and there is considerable demand for their purchase. It is proposed to sell these, and build other quarters with the proceeds, and so on. This by itself will not enable us to build as many such quarters, as are required, and the poorest classes will not be benefitted. An effort will be made to get co-operative house building societies, comprising the poorest artisan classes, to build houses for them. Government may advance loans to such societies on a very small interest and help with other concessions. In these operations, preference will be given to those who will be dehoused as a result of slum clearance. If they are owners of the buildings that are to be dismantled, they will get compensation. With a loan to supplement the amount, they could build better new houses. The new houses would, of course, be mortgaged till the loans were repaid. If these efforts do not succeed, the State may have to undertake to itself build more workmen's

quarters, perhaps, on a cheaper scale than hitherto. Three lakhs have been provided under this head. The question of provision of quarters for industrial workers will arise as soon as a large number of factories start working in Jaipur City. It is hoped that the bigger industrial concerns will provide some quarters for their workmen. But on principle it is better that quarters for workmen should be built by the State, or local authorities, or cooperative, or Commercial housing societies. In view of the heavy demand on the State Exchequer in the next few years, we may have to rely chiefly on private and cooperative housing societies to supplement the quarters built by the industrial concerns.

(iv) *Markets and Exhibition Court.* It is proposed to have three grain, three vegetable and fruit, two meat, and six "halwais" *markets in different parts of the City* These are estimated to cost about ten lakhs and the Exhibition Court two lakhs of rupees. There are no proper markets at present, which causes considerable difficulty both to purchasers and shopkeepers. The Exhibition Court will pay for itselfs within a few years from rents of stall. Government buildings still required have been provided for in the various departmental plans.

(v) *Land Acquisition.* For most of the buildings mentioned above, lands are already

available either as a result of acquisition or otherwise. Thus it is expected that fifteen lakhs will suffice for land acquisition.

(vi) *Underground sewage* This is easily the most important material requirement for Jaipur City, and will be taken in hand as soon as pipes are available. About fifteen miles more are required. Twelve lakhs have been provided for this purpose. No where else, perhaps, does such artistic beauty conceal so much filth, as in Jaipur City. This is most of all because of the prevalence of notions of "untouchability" more extreme than usually found in northern India. The entry of sweepers into any part of the house, or its premises, is debarred. From this springs types of latrines 'mokhi asar', 'rapatwan', 'chhitakwan' with a "sweeper lane" outside, which are the nightmares of insanitation. A complete underground sewage enabling most houses to have flush latrines is thus almost a spiritual necessity for the city.

(vii) *Paving of Kachcha Rastas.* Over six lakhs have already beo spent for this purpose but the majority of "kachcha rastas" still remain to be paved. Eight lakhs have been provided for this purpose.

(viii) *Encouragement of athletic and cultural activities.* In our country it is generally not get recognised that recreation matters almost as much as food. It affects not only health and mental vigour, but indeed mora-

lity also. If the essence of morality is kindness, then you can make people moral only by making them happy. In this proper recreation helps considerably. The State must, therefore, positively encourage athletic and cultural recreation. Clubs, playgrounds, gymnasiums, swimming tanks should be made available for all classes, including the working classes, and children. Dramatic and musical activities should be encouraged by construction of an open air theatre, and a close theatre and music hall combined. It is hoped that the public, particularly the well to do will donate generously for such purposes. State help will usually take the form of grants of land on a concessional or nominal rent and in particularly deserving cases cash grants also. Suitable areas for these purposes are being reserved in the new improvement schemes, and will be secured inside the City walls also, as a result of the clearance of congested areas. One lakh has been provided for cash grants.

(*ix*) *Minor sanitary improvements, including paving of Ganda Nala.* Six lakhs have been provided under this head, as detailed in the appendix.

The total requirements indicated above amount to 57 lakhs. From this should be deducted ten lakhs which are expected to be realised from sale of plots already laid out, and another ten lakhs for plots to be laid in the future.

(c) But there remains another large and necessary item This is the extension of water supply. The present position is very unsatisfactory.

Ramgarh water supply scheme was designed for	1·2 million gallons per day.
Amani Shah Scheme ,,	5 ,,
	1·7

Consumption during the peak months of 1944 was	2·4 million gallons per day.

Even with this excessive pumping in 1944, water supply worked out roughly to 9 gallons per day per head. Usually 20 gallons per head is considered really satisfactory. The excessive pumping required in recent years is, of course, largely explained by the increase of population that has taken place since 1941, when the population stood at about 1,75,000. Now it it estimated to be about 2,25,000. In the next five years with vastly increased industrial activities, population is likely to increase by another 25,000. With underground sewage, most houses will take to flush latrines, requiring an increased supply of water per capita. A large extension of water supply system is, therefore, essential It was very unfortunate that in 1931, when the Ramgarh water supply scheme was started, the 1·2 million scheme was preferred to the 3.3 million scheme now. Now two alternatives can be considered. Either to go in for the 3 3 million Ramgarh scheme, or to tap the Dhund Nadi at a distance of about 8 miles from Lachman Doongri by means of a battery of tube wells. The former was estimated in 1930 to cost as much as

Rs. 43 lakhs. This, however, provided British steel pipes. It is possible that within a year or two Indian cast iron or high pressure cement pipes may be available at a cheaper rate. The Dhund Nadi scheme would be much cheaper, because it would require only about 8 miles of pipes as compared with 17 miles from Ramgarh to Lachman Doongri. Also it will save the cost of filtration because sub-soil water will be utilised. It is considered that there is plenty of water in the sub-soil, but a trial bore, which will be put up shortly, alone can make sure. If this scheme materialises, it may cost roughly Rs. 25 lakhs.

The City improvement schemes after setting off the proceeds from the sale of plots, and the extension of water supply are likely to cost at least 72 lakhs. It would not be fair for Government to meet this entire expenditure from its general revenues. The following suggestions for easing the burden on the general revenues have to be considered.

(i) At present, Government have to meet the bulk of the expenditure of Jaipur Municipality, by means of net grant averaging about three lakhs a year. The Municipal Council levy only very minor taxes, which yield them only about a lakh a year. This is a unique position which must be altered. Obviously, it is only fair that the municipality must levy new taxes for which there is the amplest scope so that it has an income of its own, which more than covers its recurring expenditure. In this manner, the recurring grants of about three lakhs a year made by Government to the municipality can be diverted to the capital cost of the works indicated above. This may provide about 12 lakhs for the purpose. Even so another 60 lakhs

will have to be found. This also is too heavy for the State's general revenues to bear. It would be equitable, therefore, if the Municipality took a loan of at least 25 lakhs for the purpose of contributing towards the the extension of water supply, underground sewage or other schemes which will principally benefit the existing habitations. The annual repayment instalment in respect of such a loan spread over a period of 20 or 30 years, together wtih concessional interest would by no means be beyond the capacity of the Municipality. In British India smaller municipalities take and repay larger loans for similar purposes. Thus the total amount required from the general revenues of the State for improvements in Jaipur City in the next five years has been estimated to be 35 lakhs.

(1) Nowhere, perhaps, is the lot of customary sweepers, so unjust as here. They have to work in the most insanitary conditions, and yet their wages are grossly inadequate. Even the new Municipalities Act makes it penal for them to stop work, but does not give the municipality powers to compel householders to pay fair wages. The result is that most of the customary sweepers are heavily indebted to "bohras". To these money lenders go a considerable part of their cash earnings, while they live largely on scraps of food, which they get from householders, and proceeds from the sale of night soil, in which they are supposed to have "customary" rights, and which is dried into cakes round about their houses. This state of affairs must be remedied without delay. The State must build sweepers quarters for municipal and customary sweepers. These must be distributed all over the City, so that they may not have to live far from their

places of work. The law must be changed so as to ensure that householders pay fair wages. Then the customary rights in night soil must be liquidated. The sweepers' Cooperative societies must be formed, so as to prevent unscrupulous exploitation by money-lenders. Conditions of service will be improved as a result of sanitary improvements indicated above.

8. Urgent improvement of municipal towns.

These towns are the Augean stables of centuries. It will take time to convert these into centres of civic life, clean, sanitary, and well equipped with all public utilities. We must first provide their urgent requirements which are as follows:—

(a) Improvement of water supply. All baories, which supply drinking water and are responsible for the widespread prevalence of the terrible disease of guinea worm, must be immediately filled up and converted into draw wells Existing wells must be repaired and cleaned periodically.

(b) Roads and lanes must be paved, and pucca drains provided.

(c) General sanitary improvements must be affected. The most important need is to have an adequate number of sweeper, and proper arrangements for removal of night-soil and rubbish.

(d) Lighting should be improved.

(e) Specially congested areas should be opened out, and where necessary new improved areas should be laid out with the help of town improvement committees and State agency. Government have already taken in hand

improvement schemes in respect of three municipal towns Jhunjhunu, Dausa, Chatsu. In place of Sawai Madhopur an entirely new town, to be called Sawai Manpur, is being laid out. The old town is particularly unhealthy for various reasons. Its water supply is brackish and it is so situated in the midst of adjoining hills that with every heavy shower of rain, the whole town gets flooded for hours. The new town will have large industrial areas. Several new industrial concerns have already been allotted plots is these areas. This new town, with rail connection with both B.B.&C.I.R. (broad gauge) and the Jaipur State Railway (meter gauge) will be ideally situated. both for large scale industries, and for wholesale export and import business, and should, thus, become the "Gateway of Jaipur State". A large mandi is being established close to the railway station. The new government offices, courts, and other public buildings required for the town, since its recent construction as the district headquarters, are already under construction. In all these towns, where improvement schemes have been taken in hand, town improvement committees have been set up, and are consulted. These improvement schemes, including the lay out of the new town at Sawai Madhopur, are expected to be self-supporting, through sale of the new plots.

6. Further development.

In course of time, the municipalities will have to provide the civic amenities, and public utilities that the advancing standards of city life now demand. The scope of these have increased rapidly in western countries. Apart from roads, drains, conservancy and parks, municipal functions in the west now include provision of compulsory primary, and even secondary education, with special amenities like a free meal, adult education, supply of pure milk, control of markets, advanced public health measures and medical relief, nurseries, creches for children of the working classes construction of workmen's quarters, maintenance of their own centres of entertainment and culture theatres, cinemas, and libraries. Our panchayats must become the agencies of rural development in all its aspects, agricultural, industrial sanitary, and cultural. Government officers will advise, help and supervise A Special Officer, with a diploma in Local Self-Government has been appointed for inspection and guidance of town municipalities. His work will not interfere with the control and supervision to be exercised by Deputy Commissioners over these local bodies Panchayats will also be under the control of Deputy Commissioners, and will be supervised by the revenue staff, but special panchayat staff will also be necessary for intensive guidance, supervision and help which panchayats will require in all sorts of ways, in the initial stages. For this purpose whole time staff will be required. Revenue staff cannot find time for this. This special staff will also work under the control of Deputy Commissioners. But the powers of decision, and execution must largely vest in the panchayats. The new order in villages is not a vague generalisation. It means concrete measures, all practical, every one

of which has already been realised in some village, or the other, but not all together, anywhere in India. Improved agriculture, with plenty of vagetables and fruits; fullest irrigation; consolidated holdings; cooperative societies for credit, purchase and marketing; controlled markets; better cattle, no stud bulls except the approved ones; first aid treatment of cattle disease; improved crafts; a subsidiary occupation for most cultivators small industries utilising electric power, where necessary; a communal forest; ample but controlled grazing; good drinking water supply; roads and main lanes, paved and drained, with electric lighting; pitted rubbish; no unnecessary ponds or pits, medical relief and a child welfare and maternity centre; a panchayatghar; organised games, a theatre, community dancing and singing, a radio, a library and reading room; boys and girls, men and women all literate and thoroughly alive; and above all with the will to improve, and the capacity to unite and work for the common good. Doubtless, when this new cup of community life is passed round once again to our villages, after the stagnation of some centuries, it will frequently spill over. But it is only through this fermentation, and failure, that the new order will emerge. There is no other way in this, as in higher spheres of the greatest of all arts, self-government. The statement enumerates the government grants that are proposed to be given to local bodies. But no local bodies can live, even on the lowest plane on government doles. They must tax themselves fairly and boldly. Most of all, both Government and the leaders of the people, must be fired by vision, and armed with foresight, and a determination that never falters, as only thus "maps cease to be maps, and become romantic visions, and cities leap to life, and become pageants of history*.

XIII.—FINANCE

THE total capital cost of the Five Year Plan amounts to nine crores. Its recurring cost of five years works out to nearly one crore twenty lakhs. In other words, we may estimate a permanent annual increase in the recurring expenditure of twenty-five lakhs.

Out of the capital cost, about six crores will be for projects, which will be directly, and immediately revenue earning or highly productive. The chief among these are the hydro-electric and irrigation projects, totalling nearly four crores, and the railway extension costing nearly one crore. Lesser projects of this nature are many, such as the projects for increase of irrigation by minor means, involving government expenditure of about fourteen lakhs, twenty lakhs investments in new heavy or medium industries, State motor transport services involving four lakhs. The large scale increase in afforestation will be highly productive, but only after a lapse of at least ten years.

The reserve funds of the State amount to about six and half crores. Of these about four and half crores are invested in three, or three and half per cent Government of India securities. If the proceeds of these four and half crores securities are utilized for financing the hydro-electric scheme, the irrigation projects and the railway extension scheme, the net annual yield, after defraying the maintenance charges will amount to considerably more than the interest that at present accrues to the State. The irrigation plan shows that the average net yield on the hydro-electric scheme and the irrigation projects can safely be

estimated at about 5.2 per cent. Different ways are possible for financing the rest of the capital cost. One of these would be for the State to raise loan for the purpose.

As for the increase in recurring expenditure entailed by the plan, there is firstly the increased recurring income that would accrue as a result of the change over from the investment in the Government of India securities to the highly productive schemes indicated above. Secondly, the tax resources in general of this State have hitherto been less developed than in most other States, and there is considerable scope for increase both in the receipts from existing taxes, as for instance excise, and also by way of new taxation. Thus the cost of the plan, both capital and recurring, are well within the finances of the State At the same time, the execution of the plan will help to tide over the reduction of employment which will now set in because of the end of the war and also serve to check any tendencies to an undue fall in prices that may appear within the next few years. Above all the effect of the plan on the economic welfare of the people will be manifold, and this increase in general prosperity is bound to be reflcted in the revenues of the State.